

US EPA RECORDS CENTER REGION 5



442023

**EXPLANATION OF SIGNIFICANT DIFFERENCES**

**SKINNER LANDFILL SUPERFUND SITE  
WEST CHESTER, OHIO**

West Chester,  
Butler County, Ohio

September 2012

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## **List of Acronyms**

BCDES	Butler County Department of Environmental Services
BCWS	Butler County Water and Sewer Department
CD	Consent Decree
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
C.F.R.	Code of Federal Regulations
CQA	Construction Quality Assurance
ESD	Explanation of Significant Differences
EPA	U.S. Environmental Protection Agency
FML	Flexible membrane liner
FS	Feasibility Study
GCL	Geosynthetic clay liner
GIS	Groundwater Interception System
LTPP	Long-Term Performance Plan
mg/L	milligrams per liter, or parts per million
MSL	mean sea level
NCP	National Contingency Plan
NPL	National Priorities List
Ohio EPA	Ohio Environmental Protection Agency
O&M	Operation and Maintenance
PRPs	Potentially Responsible Parties
RA	Remedial Action
RD	Remedial Design
RI	Remedial Investigation
RI/FS	Remedial Investigation/ Feasibility Study
ROD	Record of Decision
SVE	Soil Vapor Extraction
SVOCs	Semi-volatile organic compounds
UAO	Unilateral Administrative Order
VOCs	Volatile Organic Compounds

## **1.0 INTRODUCTION TO THE SITE**

The Skinner Landfill Superfund Site is located in West Chester, an unincorporated area in Section 22 of Union Township, Butler County, Ohio (see Figures 1 and 2). The site is comprised of approximately 78 acres of hilly terrain and is bordered on the east by Conrail railroad tracks. Land use in the immediate site vicinity includes business and residential uses to the west and crop farming to the north. Cincinnati-Dayton Road borders the site to the west. The East Fork of Mill Creek runs through the southern portion of the site. The Union Elementary School is located immediately across Cincinnati-Dayton road to the west of the site.

This Explanation of Significant Differences (ESD) describes a change in a component of the remedy at the site. This proposed action is taken pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as amended, 42 U.S.C. §§ 9604, 9607 and 9622, and the National Contingency Plan (NCP), 40 C.F.R. Part 300. CERCLA Section 117(c) and 40 C.F.R. § 300.435(c)(2)(i) of the NCP authorize the publishing of an ESD when the U.S. Environmental Protection Agency (EPA) determines that a remedial action differs significantly in scope, performance or cost from the remedy originally selected for a Superfund site, but the change to the remedial action does not fundamentally alter the selected remedy.

EPA is the lead agency for CERCLA enforcement at the site and the Ohio Environmental Protection Agency (Ohio EPA) is the support agency.

## **1.1 STATEMENT OF PURPOSE**

The purpose of this ESD is to modify one of the remedy components in the 1993 Record of Decision (ROD). This change does not fundamentally alter the goals selected in the June 4, 1993 ROD, but modifies the remedy. The modified remedy, which is already in place at the site, will continue to limit the exposure of humans and environmental receptors to site contaminants. This ESD will become part of the Administrative Record for the site, as required by the NCP at 40 C.F.R. 300.825(a)(2).

One of the remedy components from the 1993 ROD was upgradient groundwater control. The ROD required diversion of upgradient groundwater flow to help prevent groundwater from flowing into the site and was to be used if the installation of the landfill cap was not sufficient to depress the water table beneath the elevation of the waste in the landfill. This requirement was based on the assumption that the upgradient groundwater flowing into the site becomes contaminated as it flows through the site. When it wrote the ROD, EPA believed that contaminated waste materials were in contact with the groundwater and that this would cause contamination of the groundwater. However, it is now apparent that contact between the groundwater and the waste materials beneath the landfill cap has not resulted in contamination of the groundwater above site-specific groundwater trigger levels and does not affect the protectiveness of the selected remedy. This ESD documents EPA's decision to forego the requirement to implement upgradient groundwater control measures even though the waste in the landfill is in contact with site groundwater.

## **1.2 SITE ADMINISTRATIVE RECORD AND SITE REPOSITORY**

The Administrative Record and information repositories for the Skinner Landfill Superfund Site may be found at:

EPA, Region 5  
Superfund Division, 7<sup>th</sup> Floor  
77 West Jackson Boulevard  
Chicago, IL 60604

Middletown Public Library System  
West Chester Branch  
7900 Cox Road  
West Chester, OH 45069

## **2.0 SITE CHRONOLOGY**

**Table 1. Chronology of Site Events**

Date	Event
1976	Initial discovery of problem
09/1983	National Priorities List (NPL) Listing
09/1984 – 06/1993	Remedial Investigation/Feasibility Study (RI/FS)
09/30/1992	Interim ROD
12/09/1992	Unilateral Administrative Order (UAO)
06/04/1993	Final ROD (Sitewide)
03/1994 – 06/1996	Remedial Design (RD)
06/18/1996	Remedial Action (RA) start
03/17/1999	First five-year review
04/02/2001	Consent Decree for RA
04/02/2001	RA construction start
09/27/2001	Preliminary Close Out Report
03/27/2003	Final inspection of site
09/30/2003	RA completed
03/17/2004	Second five-year review
2/14/2006	Environmental covenant under the Uniform Environmental Covenants Act recorded in Butler County, Ohio land records
12/2006 – 01/2007	Damaged piezometers abandoned and new piezometers installed
06/2008	Time-critical removal action completed
3/17/2009	Third five-year review

## **2.1 SITE HISTORY**

The site is located approximately 15 miles north of Cincinnati, near West Chester, Butler County, Ohio, in Township 3, Section 22, Range 2. The site is bordered on the east by a Norfolk Southern Railway Company right-of-way, on the south by the East Fork of Mill Creek, on the north by wooded and agricultural land, and on the west by a gravel driveway and Cincinnati-Dayton Road.

The site is located in a highly dissected area that slopes from a till-mantled-bedrock upland to a broad, flat-bottomed valley that is occupied by the main branch of Mill Creek. Elevations on the site range from a high of nearly 800 feet above mean sea level (MSL) in the northeast, to a low of 645 feet above MSL near the confluence of Skinner Creek and the East Fork of Mill Creek. Both Skinner Creek and the East Fork of Mill Creek are small, intermittent shallow streams. Both of these streams flow to the southwest from the site toward Mill Creek, which in turn flows into the Ohio River.

The property was originally developed as a sand and gravel mining operation and was subsequently used as a landfill from 1934 to 1990. The approximately 10.5-acre landfill is fenced on all sides with locked access gates on the south and west sides of the site. The only structures on-site are the metal electrical box located near the south entrance gate and the gas vents. A gravel access road is located inside the fence on the south and west sides of the site.

## **2.2 SITE CONTAMINATION**

In 1976, in response to a fire at the site and reports of observations of a black, oily liquid in a waste lagoon on the site, the Ohio EPA began a site investigation. Before Ohio EPA could complete the investigation, the site owner/operator covered the waste lagoon with a layer of demolition debris, thereby hindering the investigation. Albert Skinner, the site owner at the time, dissuaded the Ohio EPA from accessing the lagoon area by claiming that nerve gas, mustard gas, incendiary bombs, phosphorus, flame throwers, cyanide ash, and other explosive devices were buried at the landfill. This prompted Ohio EPA to request the assistance of the U.S. Army. Albert Skinner, in the presence of Ohio EPA attorneys and the U.S. Army investigators, subsequently retracted his claims of the presence of ordnance. The U.S. Army and Ohio EPA then dug several trenches into the buried waste lagoon, and found black and orange liquids and a number of barrels of waste. Subsequently, the U.S. Army performed records searches that found no evidence of munitions of any sort having been disposed at the site.

Based on the initial studies, materials deposited at the site include demolition debris, household refuse and a wide variety of chemical wastes. The waste disposal areas include a now buried former waste lagoon near the center of the site and a landfill. The buried lagoon was used for the disposal of paint wastes, ink wastes, creosote, pesticides, and other chemicals. The landfill area, located north and northeast of the buried lagoon, received predominantly demolition debris.

Based on sampling results, the hazardous substances that have been released at the site in each media include:

<b>Soil</b>	<b>Groundwater</b>
Toluene	Benzene
Xylenes	Ethylbenzene
Ethylbenzene	Xylenes
1,1,2-Trichloroethane	Phenol
1,2-Dichloropropane	2-Methyl phenol
Benzene	4-Methyl phenol
Naphthalene	Acetone
2-Methylnaphthalene	1,2-Dichloroethane
Phenanthrene	Chlorobenzene
Bis(2-ethylhexyl)phthalate	2-Hexanone
Benzoic acid	Methylene chloride
Fluoranthene	Toluene
Pyrene	1,1,2,2-Tetrachloroethylene
Hexachlorobenzene	1,1,2-Trichloroethane
Flourene	1,1 -Dichloroethane
Phenol	1,2-Dichloroethane
Butylbenzylphthalate	1,2-Dichloroethene
1,3-Dichlorobenzene	1,2-Dichloropropane
1,4-Dichlorobenzene	Chloroethane
Hexachlorobutadiene	Chloroform
Acenaphthene	Trichloroethene
Benzo(a)anthracene	Vinyl Chloride
Chrysene	1,3-Dichlorobenzene
Hexachlorocyclopentadiene	1,4-Dichlorobenzene
Heptachlor	Benzoic acid
Endrin ketone	Bis(chloroethyl)ether
Gamma Chlordane	Naphthalene
Antimony	
Cadmium	
Lead	
Silver	
Thallium	

#### **Leachate**

Benzene
Chloroethane
1,1-Dichloroethane
Bis(2-chloroethyl)ether
Hexachlorobutadiene

In addition, the risk assessment concluded that the potential routes of current and future exposure above safe levels included the following scenarios: ingestion of and direct contact with contaminated soils; ingestion of affected groundwater; dermal contact with groundwater; inhalation of chemicals that volatilize from groundwater to air during showering; and ingestion of and direct contact with surface water and sediments during recreational activities. Inhalation

of fugitive dust and volatile chemicals was also evaluated qualitatively as a potential exposure route but did not warrant a quantitative assessment because emissions from surface soil would likely be low. This is because the most contaminated portion of the site, the buried waste lagoon, is covered by up to 40 feet of demolition debris and is not considered a source of air risk under current conditions.

The risk assessment also showed that potential future surface water impacts at the East Fork of Mill Creek could present unacceptable risks if no remedial actions were taken at the site.

### **2.3 INITIAL RESPONSE**

In 1982, EPA conducted a limited site investigation for the purpose of scoring the site for inclusion on the National Priorities List. The investigation showed that groundwater southeast of the buried waste lagoon was contaminated with volatile organic compounds (VOCs). The site was proposed for the NPL in December 1982 and finalized on the NPL in September 1983.

EPA completed a search for potentially responsible parties (PRPs) in April 1983. The results of that search were later supplemented by information requests under CERCLA Section 104(e) and by administrative depositions.

In 1986, EPA began a Phase I Remedial Investigation with the sampling of groundwater, surface water, and soils. A biological survey of the East Fork of Mill Creek and Skinner Creek was also performed. In 1989, EPA began its Phase II RI, to further investigate site groundwater, surface water, soils, and sediments. Overall, more than 400 samples from the site were analyzed. In August 1990, through a legal proceeding, the Ohio EPA closed the site to all further landfilling activities. EPA completed the Phase II RI in May 1991 and both a Baseline Risk Assessment and Feasibility Study in 1992.

The former dump area was used for the disposal of a variety of wastes, including demolition debris, household refuse and assorted scrap. Chemical wastes were also disposed in this area. The total volume of wastes within the former dump was estimated at 120,000 cubic yards. EPA's water samples collected during the Phase I RI indicated that the most concentrated groundwater contamination found at the site was in the area beneath the former dump. Site records and deposition testimony of waste haulers indicated that large quantities of chemical wastes were disposed in the waste lagoon. These wastes included creosote, paint wastes, ink wastes, and pesticides. The RI/FS estimated that the total volume of contaminated materials in the lagoon was 107,000 cubic yards. The FS estimated that 17,000 cubic yards of lagoon waste materials exceeded risk-based protective levels.

### **2.4 SELECTED REMEDY**

EPA organized the remedial action at the site into two phases, or "operable units." The first operable unit was an interim action to protect human health from any immediate potential risks. EPA's ROD for the first operable unit interim action was signed on September 30, 1992. A Unilateral Administrative Order for the first operable unit, which included site fencing, connections to the Butler County public water system for potentially affected local users of

groundwater, and groundwater monitoring, was issued to the PRPs on December 9, 1992. Several PRPs complied with the UAO.

EPA signed the ROD for the second and final operable unit on June 4, 1993. The remedial action objectives for the final operable unit addressed potential future migration of site contaminants into groundwater and limited direct exposure of humans to site contaminants through source control measures. The remedial action addressed the source of the contamination by intercepting and treating on-site groundwater. The functions of this action were to (1) control the landfill site as a source of groundwater contamination, (2) reduce the risks associated with the site and reduce exposure to contaminated materials, and (3) prevent untreated leachate from running off-site. The groundwater response action included long-term monitoring with site-specific groundwater trigger levels. The site-specific groundwater trigger levels are contained in Appendix A.

The ROD required upgradient groundwater control measures if the contaminated waste materials remained in contact with the groundwater, based on the assumption that the continued contact of the waste materials with the groundwater would cause the groundwater to become contaminated and exceed site-specific groundwater trigger levels in downgradient groundwater monitoring wells. EPA considered the use of a barrier wall installed upgradient of the former dump and waste lagoon to control upgradient groundwater flow. The types of barrier walls considered included slurry walls, vibrating beams, and grout curtains.

In addition, during the proposed plan public comment period, it was suggested that soil vapor extraction (SVE) surrounding the lagoon wastes be considered. The ROD required that an investigation be conducted during the remedial design phase to determine the feasibility of SVE. The ROD stated that SVE would be implemented at the site if EPA determined that this technology was implementable and effective based upon the results of the investigation. The remedial design investigation was performed in 1994 to collect the data required to assess SVE. Based on the RD investigation results, EPA determined that the installation of an SVE system was not feasible.

The major components of the selected remedy included:

- Construction of a hazardous waste landfill cap over the waste;
- Interception, collection, and treatment of contaminated groundwater;
- Upgradient groundwater control;
- Monitoring; and
- Institutional controls.

## **2.5 REMEDIAL ACTION**

Judge Weber of the Federal District Court in Cincinnati, Ohio, signed the Remedial Action Consent Decree (CD) for the final operable unit on April 2, 2001. The PRP group constructed the landfill cap and the groundwater interception system (GIS) under the requirements of the CD.

Construction began in April 2001. The RA construction work was completed in September 2001, and EPA signed the Preliminary Close Out Report on September 27, 2001.

### **Landfill Cap**

The general profile of the cap from top down includes vegetative cover materials, geocomposite drainage layer, flexible geomembrane liner (FML) primary barrier layer, geosynthetic clay liner (GCL) secondary barrier layer, geocomposite gas venting layer and the prepared subgrade.

Site preparation included clearing and grubbing, preparing the GIS working platform, and removing portions of the fence. On-site borrow material was used to construct the south sidehill fill area and the landfill cap subgrade. The Construction Quality Assurance (CQA) consultant and the liner subcontractor inspected each section of subgrade to verify that the subgrade was acceptable for placement of the geomembrane panels.

The first geosynthetic layer above the subgrade is a geocomposite layer. The geocomposite layer is used for collecting landfill gas. It was installed with gas vent stubs, which allowed for ease of attachment of the gas vents prior to the installation of the overlying cap layers. The geosynthetic installation contractor manually installed the geocomposite layer. Installation of the geocomposite generally proceeded from a higher elevation to a lower elevation to minimize wrinkles.

The secondary barrier layer, a GCL, serves as a backup barrier for the primary barrier. The GCL consists of a bentonite clay layer bonded to a geotextile backing. Installation of the GCL was conducted in a manner that provided immediate coverage of the GCL by the FML at the end of each working day to prevent hydration of the GCL.

The primary barrier of the landfill cap, the FML, consists of a 60-ml polyethylene liner textured on both sides. The FML was placed directly on top of the GCL immediately following installation of the GCL. The PRPs' contractor completed the placement and seaming of the FML in a timely fashion to minimize weather exposure to the GCL.

After the CQA consultant determined that sections of the FML were of acceptable quality, the drainage layer was installed over the FML. The drainage layer is a geocomposite consisting of a geotextile heat bonded to both sides (similar material as the geocomposite gas venting layer). The drainage layer was installed over the FML to serve two purposes: 1) the geonet facilitates drainage of water that infiltrates through the vegetative cover materials, and 2) the geocomposite afforded protection for the liner system during placement of the vegetative cover materials.

A minimum of 24 inches of soil was placed over the geosynthetic materials. The cap soil was pushed over the in-place drainage layer. Grade was maintained using tubes as grade stakes, so as not to harm the underlying liner materials. The CQA consultant required that there was always a minimum of 3 feet of soil beneath the excavator and dump trucks. After the application of the cap soil layer was complete, seeding and fertilizing was conducted with a hydro-seeder. Erosion matting was used on the slopes.

Surface water drainage control for the site was achieved through the construction of a network of interceptor ditches, drainage letdowns, and culverts. The purpose of the controls is to manage surface water infiltration into the landfill, minimize landfill surface erosion, and direct infiltration away from known disposal areas.

Ten gas probes were constructed around the perimeter of the landfill to monitor landfill gas migration from the site.

### **Groundwater Interception System**

The GIS was installed to intercept and capture groundwater migrating from the landfill to the East Fork of Mill Creek. The GIS consists of a single cutoff wall of soil-bentonite keyed into bedrock, three gravel-filled trenches each with a single groundwater extraction well, and a force main system to convey the groundwater to the Butler County sanitary sewer system. The groundwater is tested to make sure the contaminant levels in groundwater discharged to the sewer system are within the limits of the PRPs' Industrial Discharge Permit from the Butler County Department of Environmental Services (BCDES).

The cut-off wall consists of a soil-bentonite slurry mixture; it is capped with native clay to provide protection and a surface for site access. The wall extends from two to three feet below ground surface to where it is keyed into the bedrock.

The interceptor trench was installed in three separate sections between the landfill and the cut-off wall. Each trench was excavated to the specified depth (ranging from 14 to 23 feet below grade). A bio-polymer slurry was placed in the trench bottom prior to placing the geotextile and backfilling, in order to ensure the integrity of the excavation sidewalls. The purpose of the geotextile is to filter out fines from the groundwater that may clog the extraction well pumps.

As backfill was placed around the interceptor trench, extraction and observation wells were installed. The groundwater extraction pumps were installed in the extraction well of each interceptor trench. The pumps consist of submersibles rated at 25 gallons per minute. The pumps' discharge is transported through a vertical discharge line that is connected to the force main. The force main extends from Extraction Well #1 to the Gravity Manhole, at which point it is discharged into the Butler County public sanitary sewer system.

### **Other Remedy Components**

Soils from two contaminated soil areas located outside the landfill area but within the limits of the site, Area BP01/BP02 and Area GW-38, were excavated and moved to the on-site landfill and incorporated under the landfill cap. After excavation of these areas, the PRPs collected and analyzed confirmation soil samples from each location to ensure that all the contaminated soil was excavated.

Monitoring wells and piezometers were installed in and around the landfill to: 1) monitor the groundwater elevation under the cap to determine contact with buried waste, and 2) assess the long-term performance of the groundwater interception system (interception trench and cut-off

wall) in accordance with the Long-Term Performance Plan (LTPP) (part of operation and maintenance, O&M). During the RA construction activities, the PRPs installed nine new groundwater monitoring wells and one replacement groundwater well. Twelve piezometers were installed, four of which are installed through the landfill cap in order to monitor whether the groundwater is in contact with landfill waste.

The remedy also restricts physical access to the site with a six-foot high fence with barbed wire at the top, around the entire site perimeter. The fence is sufficient to prevent the public from easily entering the site. The fence is posted with numerous visible warning signs to inform the public of potential site hazards.

Nearby residences located southwest of the site were connected to a public water supply in order to prevent those residents from potential exposure to contaminated groundwater.

In January 2006, an environmental covenant for the site under Ohio's Uniform Environmental Covenants Act was signed by the site owners and was recorded in Butler County on February 14, 2006. The environmental covenant was intended to prevent the development and use of land within the site boundary, to assure the integrity of the landfill cap and other components of the remedial action, and to prevent the potable use of site groundwater.

### **Other Issues**

In 2006, it was necessary to replace four inoperable piezometers. Piezometers P-9 to P-12 were used to monitor groundwater levels beneath the landfill cap, with respect to whether groundwater was in contact with the waste material. Subsurface settlement caused the original piezometers to warp, which restricted access to the groundwater level measurement probes. The former piezometers were replaced with piezometers P-9R to P-12R, using a larger diameter stainless steel casing to minimize future constriction of the well casings. The piezometer replacement took place between December 2006 and January 2007.

In August 2007, Ohio EPA was notified via a complaint that assorted electronic waste (e-waste) was being stored in open containers along the southwestern portion of the fence surrounding the site. Ohio EPA investigated the complaint and identified 78 one-cubic-yard cardboard containers of crushed computer glass and a roll-off container of assorted computer parts, including intact monitors and hard drives.

Ohio EPA sampled the waste material and determined it to be hazardous waste based on its high lead content. In March 2008, Ohio EPA requested assistance from EPA with the assessment, removal, and disposal of the hazardous waste.

EPA confirmed that the waste exceeded hazardous waste regulatory limits for lead. EPA initiated a time-critical removal of the hazardous waste. Approximately 131 tons of hazardous waste was disposed off-site. EPA completed the removal action on June 11, 2008.

### **3.0 BASIS FOR THE DOCUMENT**

CERCLA Section 117(c) and 40 C.F.R. § 300.435(c)(2)(i) of the NCP authorize the publishing of an ESD when EPA determines that a remedial action differs significantly in scope, performance or cost from the remedy originally selected for a Superfund site, but the change to the remedial action does not fundamentally alter the selected remedy. As noted above, the ROD documenting the choice of final remedial actions for the Skinner Landfill Site was finalized and signed by EPA on June 4, 1993.

Sampling results of groundwater target compounds show that the groundwater does not pose an endangerment to public health, welfare, or the environment. Area residents have been connected to the municipal water supply and there is no potable or other known use of groundwater where contaminants have been detected. Monitoring results of groundwater collected in the downgradient interceptor trench, surface water, and groundwater from monitoring wells located downgradient of the landfill all indicate that no consistent trigger levels exceedances have been detected since monitoring began in 2003. The exceedances that were detected consisted mostly of naturally-occurring inorganic constituents, the presence of which are consistent with the geologic conditions at the site. Since it is not necessary to implement the ROD element of upgradient groundwater control to protect human health and the environment, EPA has determined by this ESD that the implementation of upgradient groundwater control measures will not be required.

### **3.1 REVIEW OF SITE DATA**

The remedy installed in 2001 has been operating for approximately 11 years with contaminant concentrations in groundwater generally declining or remaining stable. Regular monitoring of groundwater wells (Figure 3 shows sampling locations) downgradient of the interceptor trench and slurry wall indicates that exceedences of trigger levels have been limited to scattered occurrences as documented in the monitoring reports from 2003 to 2011. Samples are analyzed for VOCs, semi-volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls, and metals. Several metals (arsenic, selenium, chromium, mercury, cyanide) and one VOC (benzene) were detected above trigger levels at various groundwater sample locations; however, the quarterly analytical results before and after the detections were either below the trigger levels or non-detect. Several metals (arsenic, chromium, and zinc) and SVOCs (fluoranthene, naphthalene, phenanthrene, and phenol) were detected above trigger levels at various surface water sample locations; however, the quarterly analytical results before and after the detections were either below the trigger levels or non-detect (see Appendix B for the most recent groundwater results, 2008-2011). Since the installation of the new piezometers, the groundwater elevations under the landfill cap indicate that groundwater levels have dropped below the buried waste at piezometer P-12R.

In addition, data provided by the Butler County Water and Sewer Department (BCWS), formerly known as BCDES, for the groundwater upgradient of the slurry wall (see Appendix C) is consistent with the limited groundwater trigger level exceedences from monitoring wells located downgradient of the slurry wall. BCWS-reported concentrations that exceed site-specific groundwater trigger levels consist of one cyanide level of 0.015 milligrams per liter (mg/L) (compared to the 0.01 mg/L trigger level) on April 25, 2003; and lead concentrations of 0.0045,

0.023, 0.02, and 0.011 mg/L on October 28, 2003, June 26, 2008, October 9, 2008, and March 10, 2008, respectively (compared to the site-specific trigger level for lead of 0.0042 mg/L). No parameters monitored by BCWS have exceeded any associated daily permit levels. Based on the geologic deposits present at the site, these inorganic constituents are considered to be naturally-occurring, especially at the low levels detected.

Contaminants present at the site have been reduced over the past 11 years due to the continued operation of the groundwater interception system and because of natural degradation, dilution and dispersion mechanisms. As long as the source control measures provided by the GIS are continued, contamination remaining on the site will continue to be controlled and removed. The PRPs will continue operation and maintenance of the remedy and adequate groundwater sampling.

In addition, the elevations beneath the cap documented in the monitoring reports from 2003 to 2011 indicate that the waste material underneath the landfill cap is in contact with site groundwater as determined in accordance with the O&M LTPP. Under the 1993 ROD, the fact that the groundwater is still in contact with the landfill waste would require implementation of upgradient groundwater control measures. However, the groundwater monitoring results demonstrate that contact with the waste material is not causing contamination of the site groundwater to exceed site-specific groundwater trigger levels. Therefore, the goals of EPA's selected remedy – to prevent contamination of the site groundwater and to provide protection of human health and the environment – have been met without the need for upgradient groundwater control.

#### **4.0 DESCRIPTION OF SIGNIFICANT DIFFERENCES**

The significant difference between the selected remedy in the ROD and the modification described in this ESD is that upgradient groundwater control measures will not be implemented. As noted above, contact of site groundwater with the waste materials beneath the landfill cap has not resulted in contamination of site groundwater above site-specific groundwater trigger levels and does not affect the protectiveness of the selected remedy. The groundwater interception system, a component of the remedy, will continue to collect and treat site groundwater and prevent migration of groundwater contaminants off-site. Costs to operate and maintain the remedy systems in place and operating at the site will not change as a result of this ESD.

#### **5.0 SUPPORT AGENCY COMMENTS**

The Ohio EPA was consulted regarding these changes and has reviewed this ESD. Ohio EPA supports this change to the site remedy. Ohio EPA indicated approval of the ESD with a concurrence letter dated August 16, 2012 (see Appendix D).

#### **6.0 STATUTORY DETERMINATIONS**

EPA believes that the modified remedy described in this ESD is protective of human health and the environment, complies with federal and state requirements that are applicable or relevant and appropriate to this remedial action, and is cost effective. In addition, the remedy utilizes permanent solutions to the maximum extent practicable for this site. The revised remedy

complies with the public participation portions of both the NCP at 40 C.F.R. Section 300.435(c)(2)(i) and the statutory requirements of CERCLA Section 117(c), and satisfies the requirements of Section 121 of CERCLA. In addition, since wastes will be left in place on-site, five-year reviews will continue to be conducted to ensure that the remedy continues to provide adequate protection, in accordance with CERCLA Section 121 and the NCP (40 CFR Part 300).

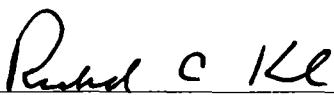
## **7.0 PUBLIC PARTICIPATION COMPLIANCE**

EPA, in coordination with Ohio EPA, will make this explanation and supporting information available to the public via the Administrative Record, the information repositories (noted elsewhere in this document), and EPA's web page for the Skinner Landfill Superfund Site, <http://www.epa.gov/region5/cleanup/skinner/index.htm>. EPA will ensure that a notice that briefly summarizes the ESD, and provides basic reasons for such differences, is published in a newspaper of local circulation (see Appendix E). By doing so, EPA will meet the public participation requirements of the NCP, 40 C.F.R. Section 300.435(c)(2)(i).

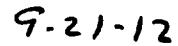
In addition, EPA, in coordination with Ohio EPA, will observe community reaction to the notice placed in the newspaper.

## **8.0 APPROVAL**

Approved by:



Richard C. Karl, Director  
Superfund Division  
EPA Region 5

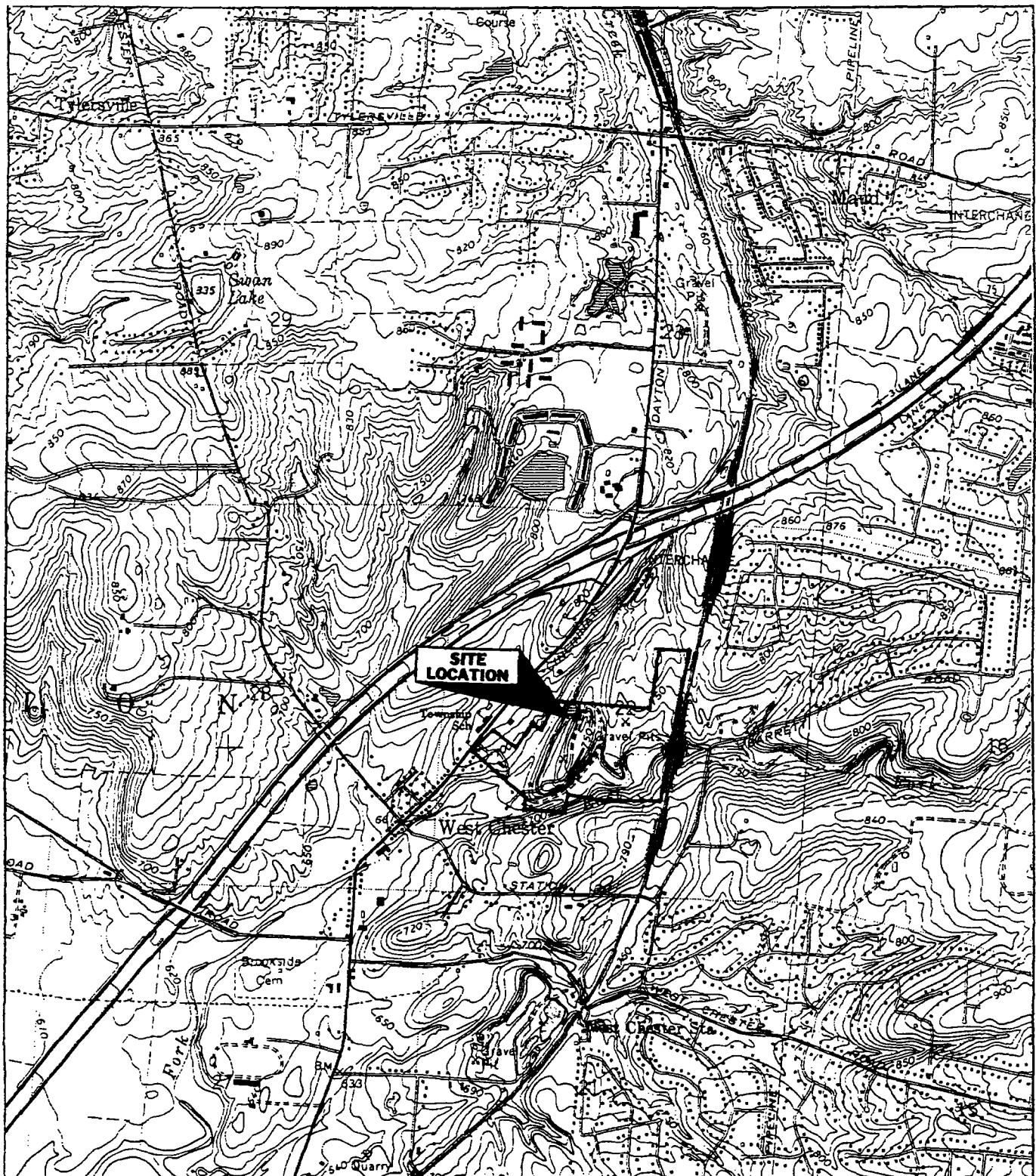


Date

## **FIGURES**

## **FIGURE 1**

### **Site Location Map – Butler County, Ohio**



Base taken from USGS Glendale, Ohio  
7.5' Topographic Quadrangle, photorevised 1987



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SKINNER LANDFILL

SITE VICINITY MAP

BUTLER COUNTY, OHIO

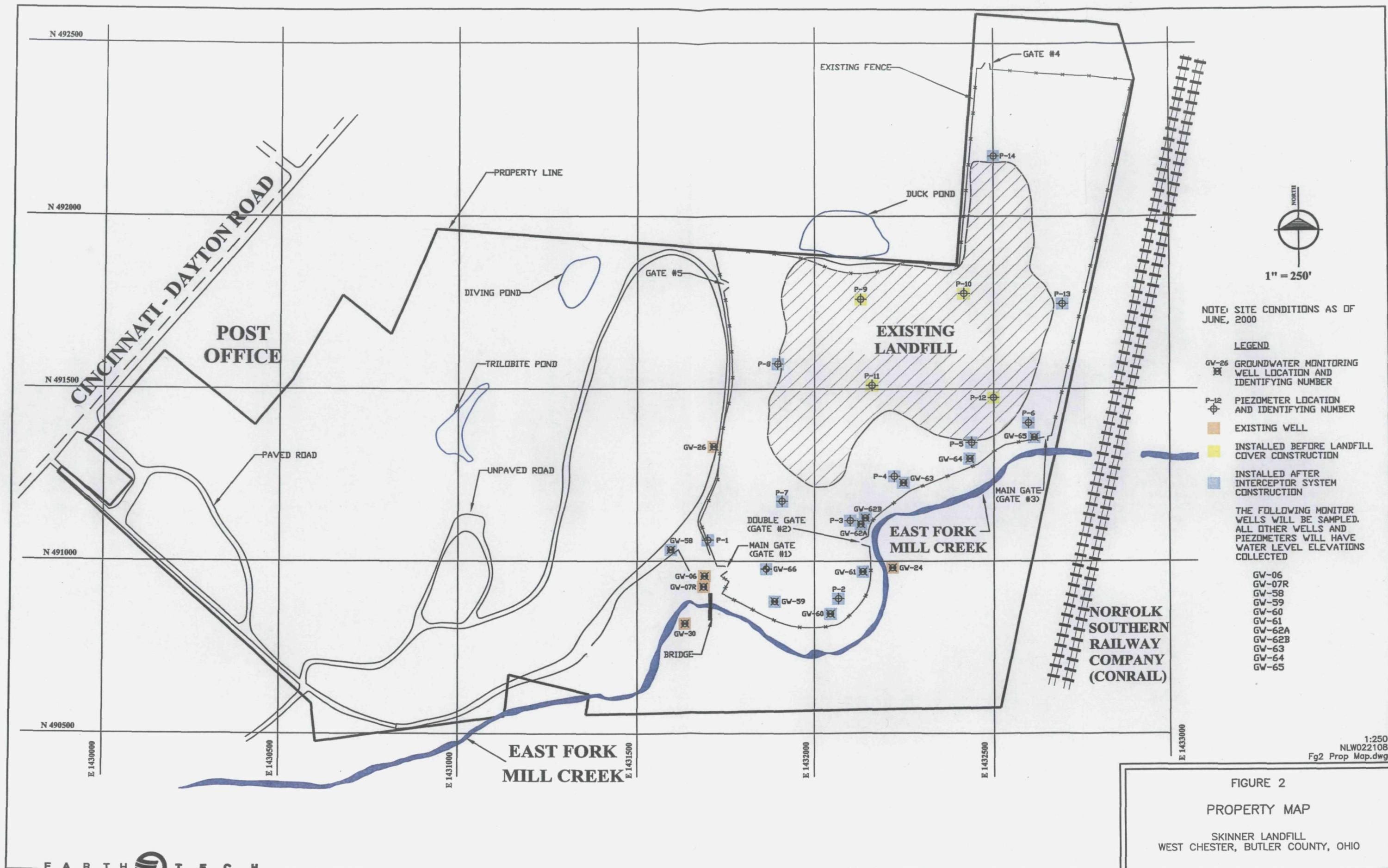
**Figure 1**

## **FIGURE 2**

### **Site Location Map – Property Map**

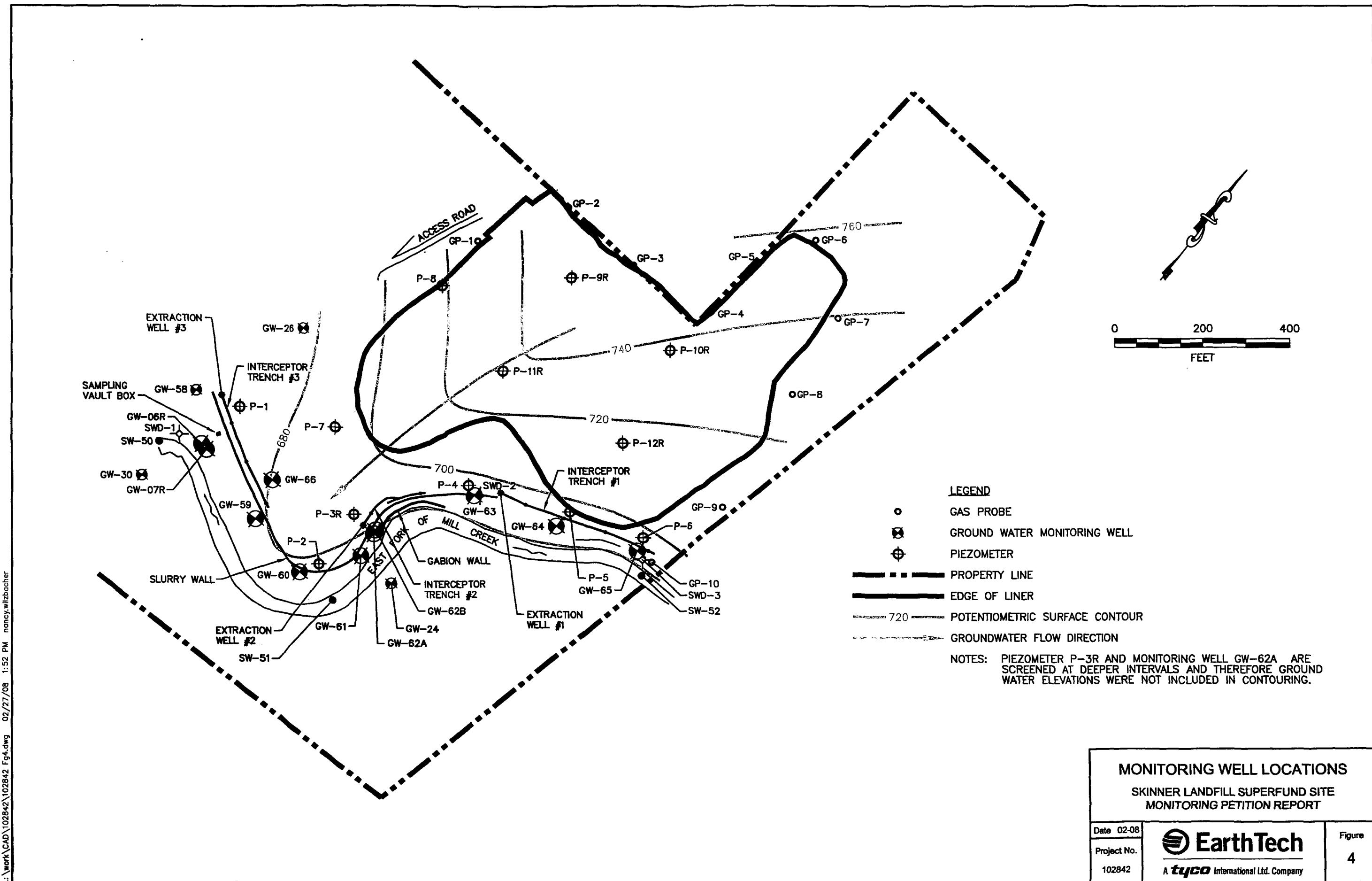
## **FIGURE 3**

### **Monitoring Well Locations**



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## **APPENDICES**



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## **APPENDIX A**

### **Trigger Levels for the Skinner Landfill Site**

Skinner Landfill  
Operation & Maintenance-Long Term Performance Plan

**TABLE 7**  
**TARGET COMPOUND LIST**

Volatiles	CAS Number	Quantitation Limits (l)
		Water (ug/L)
1. Chloromethane	74-87-3	1.0
2. Bromomethane	74-83-9	1.0
3. Vinyl Chloride	75-01-4	1.0
4. Chloroethane	75-00-3	1.0
5. Methylene Chloride	75-09-2	1.0
6. Acetone	67-64-1	1.0
7. Carbon Disulfide	75-15-0	1.0
8. 1,1-Dichloroethene	75-35-4	1.0
9. 1,1-Dichloroethane	75-35-3	1.0
10. 1,2-Dichloroethane (total)	540-59-0	1.0
11. Chloroform	67-66-3	1.0
12. 1,2-Dichloroethane	107-06-2	1.0
13. 2-Butanone	78-93-3	1.0
14. 1,1,1-Trichloroethane	71-55-6	1.0
15. Carbon Tetrachloride	56-23-5	1.0
16. Bromodichloromethane	75-27-4	1.0
17. 1,2-Dichloropropane	78-87-5	1.0
18. cis-1,3-Dichloropropene	10061-01-5	1.0
19. Trichloroethene	79-01-6	1.0
20. Dibromochloromethane	124-48-1	1.0
21. 1,1,2-Trichloroethane	79-00-5	1.0
22. Benzene	71-43-2	1.0
23. trans-1,3-Dichloropropene	10061-02-6	1.0
24. Bromoform	75-25-2	1.0
25. 4-Methyl-2-pentanone	108-10-1	1.0
26. 2-Hexanone	591-78-6	1.0
27. Tetrachloroethene	127-18-4	1.0
28. Toluene	108-88-3	1.0
29. 1,1,2,2-Tetrachloroethane	79-34-5	1.0
30. Chlorobenzene	108-90-7	1.0
31. Ethyl benzene	100-41-4	1.0
32. Styrene	100-42-5	1.0
33. Xylenes (total)	1330-20-7	1.0

Skinner Landfill  
Operation & Maintenance-Long Term Performance Plan

**TABLE 7 (cont.)**

**TARGET COMPOUND LIST**

Semi-volatiles (2, 3)	CAS Number	Quantitation Limits (1)	
		Water (ug/L)	Soil/Sediment (mg/kg)
34. Phenol	108-95-2	10	330
35. bis(2-Chloroethyl) ether	111-44-4	10	330
36. 2-Chlorophenol	95-57-8	10	330
37. 1,3-Dichlorobenzene	541-73-1	10	330
38. 1,4-Dichlorobenzene	106-46-7	10	330
39. 1,2-Dichlorobenzene	95-50-1	10	330
40. 2-Methylphenol	95-48-7	10	330
41. 2,2'-oxybis-(1-Chloropropane) #	108-60-1	10	330
42. 4-Methylphenol	106-44-5	10	330
43. N-Nitroso-di-n-dipropylamine	621-64-7	10	330
44. Hexachloroethane	67-72-1	10	330
45. Nitrobenzene	98-95-3	10	330
46. Isophorone	78-59-1	10	330
47. 2-Nitrophenol	88-75-5	10	330
48. 2,4-Dimethylphenol	105-67-9	10	333
49. bis(2-Chloroethoxy) methane	111-91-1	10	330
50. 2,4-Dichlorophenol	120-83-2	10	330
51. 1,2,4-Trichlorobenzene	120-82-1	10	330
52. Naphthalene	91-20-3	10	330
53. 4-Chloroaniline	106-47-8	10	330
54. Hexachlorobutadiene	87-68-3	10	330
55. 4-Chloro-3-methyphenol	59-50-7	10	330
56. 2-Methylnaphthalene	91-57-6	10	330
57. Hexachlorocyclopentadiene	77-47-4	10	330
58. 2,4,6-Trichlorophenol	88-06-2	10	330
59. 2,4,5-Trichlorophenol	95-95-4	25	800
60. 2-Choronaphthalene	91-58-7	10	330
61. 2-Nitroaniline	88-74-4	25	800
62. Dimethylphthalate	131-11-3	10	330
63. Acenaphthlene	208-96-8	10	330
64. 2,6-Dinitrotoluene	606-20-2	10	330
65. 3-Nitroaniline	99-09-2	50	800
66. Acenaphthene	83-32-9	10	330
67. 2,4-Dinitrophenol	51-28-5	25	800
68. 4-Nitrophenol	100-02-7	25	800
69. Dibenzofuran	132-64-9	10	330
70. 2,4-Dinitrotoluene	121-14-2	10	330
71. Diethylphthalate	84-66-2	10	330
72. 4-Chlorophenyl-phenyl ether	7005-72-3	10	330
73. Fluorene	86-73-7	10	330

Skinner Landfill  
Operation & Maintenance-Long Term Performance Plan

TABLE 7 - (Cont.)

TARGET COMPOUND LIST

Semi-volatiles (2, 3)	CAS Number	Quantitation Limits (1)	
		Water (ug/L)	Soil/Sediment (mg/kg)
74. 4-Nitroaniline	100-01-6	25	800
75. 4,6-Dinitro-2-methylphenol	534-52-1	25	800
76. N-Nitrosodiphenylamine	86-30-6	10	330
77. 4-Bromophenyl-phenyl ether	101-55-3	10	330
78. Hexachlorobenzene	118-74-1	10	330
79. Pentachlorophenol	87-86-5	25	800
80. Phenanthrene	85-01-8	10	330
81. Anthracene	120-12-7	10	330
82. Carbazole	86-74-8	10	330
83. Di-n-butyl phthalate	86-74-2	10	330
84. Fluoranthene	206-44-0	10	330
85. Pyrene	129-00-0	10	330
86. Butyl benzyl phthalate	85-68-7	10	330
87. 3,3'-Dichlorobenzidine	91-94-1	10	330
88. Benz(a)anthracene	56-55-3	10	333
89. Chrysene	218-01-9	10	330
90. bis(2-Ethylhexyl)phthalate	117-81-7	10	330
91. Di-n-Octylphthalate	117-84-0	10	330
92. Benzo(b)fluoranthene	205-99-2	10	330
93. Benzo(k)fluoranthene	207-08-9	10	330
94. Benzo(a)pyrene	50-32-8	10	330
95. Indeno(1,2,3-cd)pyrene	193-39-5	10	330
96. Dibenzo(a,h)anthracene	53-70-3	10	330
97. Benzo(g,h,i)perylene	191-24-2	10	330

# Previously known by the name bis(2-Chloroisopropyl) ether

(1) Quantitation Limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on dry weight basis, as required by the protocol, will be higher.

Skinner Landfill  
Operation & Maintenance-Long Term Performance Plan

**TABLE 7 (cont.)**  
**TARGET COMPOUND LIST**

Pesticides/Aroclors	CAS Number	Quantitation Limits (1)	
		Water (ug/L)	Soil/Sediment (mg/kg)
98. alpha-BHC	319-84-6	0.05	1.7
99. beta-BHC	319-85-7	0.05	1.7
100. delta-BHC	319-86-8	0.05	1.7
101. gamma-BHC (Lindane)	58-89-9	0.05	1.7
102. Heptachlor	76-44-8	0.05	1.7
103. Aldrin	309-00-2	0.05	1.7
104. Heptachlor epoxide	1024-57-3	0.05	1.7
105. Endosulfan I	959-98-8	0.05	1.7
106. Dieldrin	60-57-1	0.10	3.3
107. 4,4'-DDE	72-55-9	0.10	3.3
108. Endrin	72-20-8	0.10	3.3
109. Endosulfan II	33213-65-9	0.10	3.3
110. 4,4'-DDD	72-54-8	0.10	3.3
111. Endosulfan sulfate	1031-07-8	0.10	3.3
112. 4,4'-DDT	50-29-3	0.10	3.3
113. Methoxychlor	72-43-5	0.50	17.0
114. Endrin ketone	53494-70-5	0.10	3.3
115. Endrin aldehyde	7421-36-3	0.10	3.3
116. alpha-Chlordane	5103-71-9	0.05	1.7
117. gamma-Chlordane	5103-74-2	0.05	1.7
118. Toxaphene	8001-35-2	5.0	170.0
119. AROCLOR-1016	12674-11-2	1.0	33.0
120. AROCLOR-1221	11104-28-2	0.5	67.0
121. AROCLOR-1232	11141-16-5	0.5	33.0
122. AROCLOR-1242	53469-21-9	1.0	33.0
123. AROCLOR-1248	12672-29-6	1.0	33.0
124. AROCLOR-1254	11097-69-1	1.0	33.0
125. AROCLOR-1260	11096-82-5	1.0	33.0

(1) Quantitation Limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on dry weight basis, as required by the protocol, will be higher.

Skinner Landfill  
Operation & Maintenance-Long Term Performance Plan

**TABLE 8**  
**TARGET ANALYTE LIST**

Analyte	Contract Required (1, 2, 3) Detection Limit ( $\mu\text{g/L}$ )
Aluminum	200
Antimony	60
Arsenic	10
Barium	200
Beryllium	5
Cadmium	5
Calcium	5000
Chromium	10
Cobalt	50
Copper	25
Iron	100
Lead	3
Magnesium	5000
Manganese	15
Mercury	0.2
Nickel	40
Potassium	5000
Selenium	5
Silver	10
Sodium	5000
Thallium	10
Vanadium	50
Zinc	20
Cyanide	10

- (1) Higher detection limits may only be used if the sample concentration exceeds five times the detection limit of the instrument or method in use. The value may be reported even though the instrument or method detection limit may not equal the CRQL. This is illustrated in the example where the value of 220 may be reported even though the instrument detection limit is greater than the CRQL.

For lead:

Method in use = ICP  
Instrument Detection Limit (IDL) = 40  
Sample Concentration = 220  
CRQL = 3

- (2) The CRQLs are the instrument detection limits obtained in pure water. The detection limits for samples may be considerably higher depending on the sample matrix.
- (3) The CRQLs for soils = 200 times CRQL's for water.

## **APPENDIX B**

### **Summary of Groundwater Sampling Results, 2008 - 2011**

**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for GW-06R**

Compound	Quarterly Sampling Results (All Results Expressed in Units of µg/l)										Sampling no longer required - see note 16	Trigger Level	CRQL
	Mar-08	Jun-08	Sep-08	Dec-08	Feb-09	Jun-09	Sep-09	Dec-09	Mar-10				
<b>Inorganics - Metals (Dissolved)<sup>14</sup></b>													
Aluminum	15.4 U	15.3 U	15.3 U	15.3 U	26.9 U	26.9 U	60.7 B	75.8 B					200
Antimony	2.4 U	1.6 U	1.6 U	1.6 U	4.8 U	4.8 U	4.8 U	4.8 U					60
Arsenic	2.4 U	2.5 U	2.5 UJ	2.7 B	3.6 U	3.6 U	3.6 UJ	3.6 UJ					10
Barium	199 B	211 J	168 B	195 B	146 B	199 B	198 B	188 B					1,000
Beryllium	0.10 U	0.10 U	0.10 U	0.10 U	2.3 U	2.3 U	2.3 U	2.3 U					5
Cadmium	0.10 U	0.10 U	0.10 U	0.10 U	0.2 U	0.6 B	0.3 B	0.4 B					5
Calcium	199,000	180,000 J	229,000	164,000 J	223,000	215,000	208,000	210,000					5,000
Chromium	0.30 U	2.1 B	0.20 U	0.20 U	2.7 B	1.1 B	0.4 UJ	2.2 B					11
Cobalt	0.20 U	0.50 B	1.4 B	0.30 U	0.5 U	1.3 B	0.5 U	0.5 U					50
Copper	2.3 B	3.0 B	1.2 B	0.60 U	5.3 B	6.0 B	5.9 B	5.6 B					25
Iron	69.6 B	586	60.0 B	8.1 U	24.8 B	361	291	86.6 B					7,000
Lead	1.0 B	2.4 B	1.2 B	1.2 U	1.6 UJ	1.6 U	2.7 J	4.9					3
Magnesium	35,800	34,200 J	43,600 J	29,500 J	39,700	38,000	36,400	37,200					5,000
Manganese	6.5 B	132.0	451 J	226	19.0	64.9	41.1 J	22.2					15
Mercury	0.10 U	0.10 UJ	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U					0.2
Nickel	0.40 U	0.40 U	0.40 B	0.40 U	0.4 U	1.1 B	0.8 B	0.4 U					96
Potassium	2,180 B	2,460 B	5,400	2,420 J	2,370 B	2,330 B	2,800	2,510 B					5,000
Selenium	3.9 U	3.1 U	3.1 UJ	3.1 UJ	4.3 J	3.3 U	3.3 U	3.3 U					8.5
Silver	0.30 U	0.40 U	0.40 U	0.40 U	1.3 B	0.5 U	0.5 U	0.5 U					10
Sodium	19,400	17,300 J	29,900 J	16,000 J	20,300	20,800	20,300	20,800					5,000
Thallium	4.7 B	1.8 U	1.9 B	1.8 U	1.5 R	2.1 J	1.5 UJ	1.5 UJ					40
Vanadium	1.0 U	10.4 B	12.0 B	3.2 B	1.0 U	4.1 B	1.0 U	7.5 B					50
Zinc	9.0 B	15.2 B	0.50 U	0.50 UJ	4.3 U	4.9 B	4.3 U	4.3 U					86
<b>Inorganics - Metals and Cyanide (Total)</b>													
Aluminum	141 J	457	1,190	11,500 J	178 J	161 B	303 J	84.8 B					
Antimony	2.4 U	1.6 U	1.6 U	1.6 U	4.8 U	4.8 U	4.8 U	4.8 U					
Arsenic	2.4 UJ	2.5 UJ	6.8 B	11.1	3.6 U	3.6 U	3.6 UJ	3.6 UJ					
Barium	195 B	214 J	251 J	313 J	144 J	197 B	202	205					
Beryllium	0.10 U	0.10 U	0.10 U	0.10 U	2.3 U	2.3 U	2.3 U	2.3 U					
Cadmium	0.10 U	0.10 U	0.10 UJ	0.10 UJ	0.2 U	0.6 B	0.4 B	0.4 B					
Calcium	197,000	173,000 J	235,000 J	303,000 J	235,000	201,000	205,000	225,000					
Chromium	0.60 B	3.1 B	0.20 U	15.9	2.9 B	1.7 B	0.4 UJ	2.7 B					
Cobalt	0.30 B	0.90 B	3.0 B	11.5 B	0.5 U	0.9 B	0.5 U	0.5 U					
Copper	5.40 B	5.3 B	6.0 B	23.7 B	6.7 B	6.2 B	6.6 B	5.5 B					
Cyanide	0.60 U	0.60 U	0.60 U	0.60 U	0.2 U	0.2 U	1.6 U	1.6 U					10
Iron	523	2,090	4,050 J	25,500	465	412 J	954 J	266					
Lead	0.80 UJ	3.4	4.8	21.1	1.6 UJ	1.6 U	3.7 J	4.2 J					
Magnesium	35,600	34,300 J	475,000 J	88,000 J	41,500	36,500	36,100	39,900					
Manganese	19.3	106.0	535 J	748	21.7	40.1 J	44.6	27.7					
Mercury	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 B					
Nickel	0.40 U	0.40 B	1.9 B	21.8 B	0.4 U	0.6 B	0.7 B	0.4 U					
Potassium	2,220 J	2480.0 B	3,010 J	4,840 J	2,390 J	2,130 B	2,800 J	2,750 B					
Selenium	3.9 U	3.1 UJ	3.1 UJ	3.1 U	3.3 R	3.3 U	3.3 U	3.3 U					
Silver	0.30 U	0.40 U	0.40 U	0.40 U	1.5 B	0.5 U	0.5 U	0.5 U					
Sodium	18,700	17,000 J	18,000 J	16,400 J	23,800	19,300	19,500	22,700					
Thallium	2.2 B	1.8 U	1.8 U	1.8 U	1.5 UJ	2.7 J	1.5 UJ	1.5 UJ					
Vanadium	1.0 U	12.4 B	14.5 B	31.7 B	1.0 U	4.7 B	1.0 U	7.7 B					
Zinc	11.5 J	20.7	4.8 B	67.7 J	4.3 U	4.3 U	4.3 U	4.3 U					
<b>Volatile Organic Compounds (VOCs)</b>													
<b>Semi-Volatile Organic Compounds (SVOCs)</b>													
<b>Pesticides / PCBs</b>													

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Results in BOLD indicate a detection above the Contract Required Quantitation Limit (CRQL). An analyte is only bolded if there is a corresponding Trigger Level.
- 4) Results shaded yellow, BOLD, and red with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry or Insufficient Volume)
- 7) U = Indicates compound was analyzed for but not detected.
- 8) B = (Inorganics) Indicates the result is between the Reporting Detection Limit (RDL) and Method Detection Limit (MDL) but below CRQL.
- 9) B = (Organics) Indicates the analyte was detected in the Method Blank.
- 10) UJ = A value less than the CRQL but greater than the MDL.
- 11) J = The analyte was positively identified; the associated numerical value is the estimated concentration of analyte in the sample.
- 12) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 13) CRQL = Contract Required Quantitation Limit
- 14) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 15) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.
- 16) Sampling of this well is no longer required based on petition report dated 05/15/08 and EPA approval letter dated 11/24/09.

**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for GW-07R**

Quarterly Sampling Results (All Results Expressed in Units of µg/l)

Compound	Sep-08	Dec-08	Feb-09	Jun-09	Sep-09	Dec-09	Mar-10	Sep-10	Mar-11	Sep-11	Trigger Level	CRQL	
<b>Inorganics - Metals (Dissolved)<sup>14</sup></b>		Insufficient Volume											
Aluminum	15.3 U	—	26.9 U	26.9 U	29.1 B	143 B	69 B	0.20 U	0.15 B	0.20 U		200	
Antimony	1.6 U	—	4.8 U	4.8 U	4.8 U	4.8 U	60 U	0.0088 B	0.060 U	0.060 U	60	60	
Arsenic	2.5 U	—	3.6 U	3.6 U	3.6 UJ	3.6 UJ	4.2 B	0.0081 B	0.010 U	0.010 U	20	10	
Barium	59.3 B	—	41.8 B	54.6 B	47.0 B	67.2 B	41 B	0.075 BJ	0.047 B	0.049 B	1,000	200	
Beryllium	0.10 U	—	2.3 U	2.3 U	2.3 U	2.3 U	5.0 UJ	0.0050 U	0.0050 U	0.0050 U	5	5	
Cadmium	0.10 U	—	0.2 U	0.2 U	0.2 U	0.2 U	5.0 U	0.00051 B	0.0050 U	0.0050 U	5	5	
Calcium	270,000	—	191,000	245,000	292,000	228,000	178,000	224 J	184 J	192		5,000	
Chromium	0.2 U	—	2.5 B	0.4 U	0.4 UJ	2.7 B	10 U	0.010 U	0.010 U	0.010 U	11	10	
Cobalt	1.9 B	—	0.7 B	4.0 B	4.4 B	0.5 U	0.55 B	0.0028 B	0.00084 B	0.0020 B		50	
Copper	0.6 U	—	4.9 B	5.5 B	6.6 B	5.8 B	7.5 B	0.025 U	0.0055 B	0.0090 B	25	25	
Iron	419	—	244	562	2210	9.4 B	100 U	3.67	0.10 U	2.50	7,000	100	
Lead	1.2 U	—	1.6 UJ	2.8 B	1.6 U	3.6	2.8 J	0.0030 U	0.0030 U	0.0030 U	4.2	3	
Magnesium	45,600 J	—	32,500	42,100	51,900	39,000	31,700	38.5 J	32.2	35.2		5,000	
Manganese	2,780 J	—	251	2,340	3,170 J	236	100	1.65	0.15	1.65		15	
Mercury	0.10 U	—	0.1 U	0.1 U	0.1 U	0.1 U	0.20 U	0.00020 U	0.00020 U	0.00008 B	0.2	0.2	
Nickel	0.90 B	—	0.4 U	3.1 B	3.8 B	0.9 B	1.2 B	0.0042 B	0.040 U	0.0020 B	96	40	
Potassium	2,660 B	—	1,720 B	1,830 B	2,690 B	1,210 B	1,000 B	1.97 B	1.60 B	2.27 B		5,000	
Selenium	3.1 U	—	3.3 UJ	3.3 UJ	3.3 U	3.3 U	5.0 U	0.0050 U	0.0050 U	0.0050 U	8.5	5	
Silver	0.50 B	—	1.4 B	0.5 U	0.5 U	0.5 U	10 U	0.010 U	0.010 U	0.010 U	10	10	
Sodium	2,300 J	—	14,300	18,800	26,500	19,600	10,900	16.2	10.2	12.9		5,000	
Thallium	1.8 U	—	1.5 R	1.5 U	1.5 UJ	1.5 UJ	10 U	0.0048 BJ	0.010 U	0.010 U	40	10	
Vanadium	12.8 B	—	1.0 U	7.6 B	1.0 U	8.7 B	12 J	0.0064 B	0.0060 B	0.011 B		50	
Zinc	1.1 B	—	4.3 U	4.3 U	4.3 U	4.3 U	20 U	0.020 U	0.0052 B	0.020 U	86	20	
<b>Inorganics - Metals and Cyanide (Total)</b>													
Aluminum	1,220	—	263 J	76.5 B	780 J	104 B	484	0.20 U	0.053 B	0.086 BJ			
Antimony	1.6 U	—	4.8 U	4.8 U	4.8 U	4.8 U	60 U	0.060 U	0.060 U	0.060 U			
Arsenic	2.5 U	—	3.6 U	3.6 U	3.6 UJ	3.6 UJ	3.9 B	0.0095 B	0.010 U	0.010 U			
Barium	115.0 J	—	57.9 J	56.7 B	74.6 B	70.3 B	150 B	0.070 BJ	0.054 B	0.058 B			
Beryllium	0.10 U	—	2.3 U	2.3 U	2.3 U	2.3 U	0.13 B	0.0050 U	0.0050 U	0.0050 U			
Cadmium	0.10 UJ	—	0.2 U	0.2 U	0.2 U	0.2 U	5.0 U	0.00058 B	0.0050 U	0.0050 U			
Calcium	304,000 J	—	200,000	240,000	289,000	236,000	189,000	222.0 J	189 J	200			
Chromium	0.20 U	—	2.4 B	0.4 U	0.4 UJ	2.7 B	10 U	0.010 U	0.00048 B	0.010 U			
Cobalt	2.9 B	—	0.6 B	3.6 B	5.5 B	0.5 U	2.7 B	0.0031 B	0.050 U	0.0011 B			
Copper	0.60 U	—	7.2 B	6.3 B	8.7 B	6.7 B	22 B	0.023 B	0.0080 B	0.011 B			
Cyanide	2.7 B	—	0.2 U	0.2 U	1.6 U	5.3 B	5.0	0.0050 U	0.0050 U	0.0013 B	10.0	10.0	
Iron	4740.0 J	—	434	1,090 J	7,910 J	527	8,300	2.28	0.12	2.76			
Lead	3.1	—	—	1.6 UJ	2.8 B	3.4 J	5.0 J	10 J	0.0026 B	0.0030 U	0.0030 U		
Magnesium	53,500 J	—	34,000	41,100	51,500	39,800	38,200	37.3 J	32.6	35.3			
Manganese	2,830 J	—	75.3	2280 J	3200	247	200	1.53	0.17	1.33			
Mercury	0.10 U	—	0.1 U	0.1 U	0.1 U	0.1 U	0.20 U	0.00020 U	0.00020 U	0.00020 U			
Nickel	4.3 B	—	0.4 U	2.8 B	4.5 B	0.5 B	7.5 B	0.0048 B	0.040 U	0.0026 B			
Potassium	3,190 J	—	1,740 J	1,770 B	2,730 J	1,290 B	2,240 B	1.90 B	1.80 B	2.61 B			
Selenium	3.1 UJ	—	3.3 R	3.3 U	3.3 U	3.3 U	5.0 U	0.0050 U	0.0050 U	0.0050 U			
Silver	0.40 U	—	1.1 B	0.5 U	0.5 U	0.5 U	10 U	0.010 U	0.010 U	0.010 U			
Sodium	24,800 J	—	14,600	18,100	25,600	20,000	10,400	15.7	10.9	13.2			
Thallium	1.8 U	—	—	1.5 UJ	1.5 U	1.5 UJ	1.5 UJ	10 U	0.0059 BJ	0.010 U	0.010 U		
Vanadium	13.8 B	—	—	1.0 U	9.0 B	1.0 U	8.4 B	18 B	0.0059 B	0.0072 B	0.012 B		
Zinc	4.2 B	—	—	4.3 U	4.3 U	4.3 U	10.6 B	28	0.042	0.012 B	0.010 B		
<b>Volatile Organic Compounds (VOCs)</b>	BRL	BRL	BRL	BRL	BRL	BRL	BRL	NS	BRL	NS			
<b>Semi-Volatile Organic Compounds (SVOCs)</b>	BRL	—	BRL	BRL	BRL	BRL	BRL	NS	BRL	NS			
<b>Pesticides / PCBs</b>	BRL	—	BRL	BRL	BRL	BRL	BRL	NS	BRL	NS			

1) All results expressed in micrograms per liter (µg/L).

2) Standard Inorganic Data Qualifiers have been used.

3) Results in BOLD indicate a detection above the Contract Required Quantitation Limit (CRQL). An analyte is only bolded if there is a corresponding Trigger Level.

4) Results shaded yellow, BOLD, and red with a thick outline indicates a detection above the Trigger Level.

5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ

6) — = No Sample Available (Well Dry or Insufficient Volume)

7) U = Indicates compound was analyzed for but not detected.

8) B = (Inorganics) Indicates the result is between the Reporting Detection Limit (RDL) and Method Detection Limit (MDL) but below CRQL.

9) B = (Organics) Indicates the analyte was detected in the Method Blank.

10) UJ = A value less than the CRQL but greater than the MDL.

11) J = The analyte was positively identified; the associated numerical value is the estimated concentration of analyte in the sample.

12) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.

13) CRQL = Contract Required Quantitation Limit

14) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.

15) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

16) Sampling frequency reduced to semi-annual as per petition report dated 5/15/08 and EPA approval letter dated 11/24/09.

17) NS-no sampling required for that event

**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for GW-58**

Compound	Quarterly Sampling Results (All Results Expressed in Units of µg/l)											TRIGGER LEVEL	CRQL
	Sep-08	Dec-08	Feb-09	Jun-09	Sep-09	Dec-09	Mar-10	Sep-10	Mar-11	Sep-11			
<b>Inorganics - Metals (Dissolved)<sup>14</sup></b>													
Aluminum	15.3 U	15.3 U	26.9 U	26.9 U	60.7 B	419	59 B	0.20 U	0.20 U	0.20 U			200
Antimony	1.6 U	1.6 U	4.8 U	4.8 U	4.8 U	4.8 U	60 U	0.0037 B	0.060 U	0.060 U	60	60	
Arsenic	2.5 UJ	5.6 B	3.6 U	3.6 U	3.6 UJ	3.6 UJ	3.6 J	0.0044 B	0.0038 J	0.010 U	20	10	
Barium	114 B	122 B	113 B	121 B	116 B	113 B	110 B	0.11 BJ	0.10 B	0.12 B	1,000	200	
Beryllium	0.10 U	0.10 U	2.3 U	2.3 U	2.3 U	2.3 U	0.75 J	0.0050 U	0.0050 U	0.0050 U	5	5	
Cadmium	0.10 U	0.10 U	0.2 U	0.8 B	0.4 B	0.4 B	5.0 U	0.00028 B	0.00012 B	0.0050 U	5	5	
Calcium	107,000	105,000 J	101,000	101,000	101,000	100,000	98,600	96.3 J	89.5 J	83.6		5,000	
Chromium	0.20 U	0.20 U	2.0 B	0.7 B	0.4 UJ	2.1 B	10 U	0.010 U	0.010 U	0.010 U	11	10	
Cobalt	0.30 U	0.30 U	0.5 U	0.5 B	0.5 U	0.5 U	0.93 B	0.050 U	0.050 U	0.050 U		50	
Copper	2.5 B	0.60 U	4.3 B	5.0 B	5.6 B	5.2 B	25 U	0.025 U	0.025 U	0.0093 B	25	25	
Iron	8.1 U	8.1 U	5.3 U	5.7 B	5.3 U	9.3 B	70 B	0.31	0.10 U	0.10 U	7,000	100	
Lead	2.6 B	1.2 U	1.6 UJ	1.6 U	3.0 J	2.8 B	3.0 U	0.0030 U	0.0030 UJ	0.0030 U	4.2	3	
Magnesium	31,700 J	31,600 J	29,600	30,000	31,200	31,800	30,100	27.2 J	25.1	29.2		5,000	
Manganese	5.3 J	34.8	0.5 U	0.5 U	25.1 J	26.2	62 J	0.0034 B	0.0095 B	0.0034 B		15	
Mercury	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.08 B	0.00020 U	0.00012 B	0.00020 U	0.2	0.2	
Nickel	0.40 U	0.40 U	0.4 U	0.4 U	0.4 U	0.4 U	3.1 B	0.0017 B	0.0072 B	0.040 U	96	40	
Potassium	3,210 B	3,800 J	3,270 B	3,380 B	3,840 B	3,820 B	3,740 B	3.07 B	5.33	3.70 B		5,000	
Selenium	3.1 UJ	3.1 UJ	3.3 U	3.3 U	3.3 U	3.3 U	5.0 U	0.0050 U	0.0050 U	0.0050 U	8.5	5	
Silver	0.40 U	0.40 U	0.5 U	0.5 U	0.5 U	0.5 U	1.5 B	0.010 U	0.010 U	0.010 U	10	10	
Sodium	24,200 J	28,200 J	23,000	26,800	29,500	29,200	28,200	25.0	23.6	25.5		5,000	
Thallium	2.1 B	1.8 U	1.5 R	4.5 J	1.5 UJ	1.5 UJ	5.7 B	0.0048 BJ	0.010 UJ	0.010 U	40	10	
Vanadium	9.6 B	3.2 B	1.0 U	4.1 B	1.0 U	6.3 B	11 J	0.0043 B	0.0012 B	0.011 B		50	
Zinc	0.50 U	0.50 UJ	4.3 U	14.6 B	4.3 U	4.3 U	20 U	0.0075 B	0.020 U	0.020 U	86	20	
<b>Inorganics - Metals and Cyanide (Total)</b>													
Aluminum	1188 B	1,390 J	284 J	265	1,140 J	1,230	1,090	0.20 B	1.18	1.58			
Antimony	1.6 U	1.6 U	4.8 U	4.8 U	4.8 U	4.8 U	60 U	0.0037 B	0.060 U	0.060 U			
Arsenic	2.5 U	5.3 B	4.0 J	3.6 U	3.6 UJ	3.6 UJ	10 UJ	0.0043 B	0.0037 J	0.0100 U			
Barium	133 J	135 J	122 J	133 B	122 B	124 B	130 B	0.1100 BJ	0.12 B	0.12 B			
Beryllium	0.10 U	0.10 U	2.3 U	2.3 U	2.3 U	2.3 U	5.0 UJ	0.0050 U	0.0050 U	0.0001 B			
Cadmium	0.10 UJ	0.10 UJ	0.2 U	1.0 B	0.7 B	0.7 B	5.0 U	0.00019 B	0.00029 B	0.0050 U			
Calcium	124,000 J	114,000 J	109,000	110,000	108,000	109,000	112,000	96.3 J	99.4 J	106			
Chromium	0.20 U	0.90 B	2.3 B	2.0 B	0.4 UJ	2.6 B	10 U	0.010 U	0.010 U	0.0026 B			
Cobalt	0.30 U	0.30 U	0.5 U	0.5 B	0.5 U	0.5 U	1.3 B	0.0012 B	0.0011 B	0.00068 B			
Copper	3.6 B	0.60 U	6.2 B	5.6 B	7.1 B	6.9 B	2.2 B	0.0013 B	0.0025 B	0.012 B			
Cyanide	1.3 B	0.90 B	0.2 U	0.2 U	1.6 U	1.6 U	5.0 U	0.0050 U	0.0050 U	0.0007 B	10	10	
Iron	859 J	2,890	769	615 J	1970 J	2750	2780	0.42	3.42	2.92			
Lead	4.2	3.0 UJ	1.6 UJ	1.6 U	3.7 J	3.7	2.6 B	0.0030 U	0.0031 J	0.0028 B			
Magnesium	35,100 J	33,000 J	31,500	32,100	31,800	32,000	32,400	27.1 J	27.5	30.7			
Manganese	30.2 J	92.0	24.2	16.1 J	56.7	78.9	86 J	0.019	0.096	0.12			
Mercury	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.20 U	0.00020 U	0.00014 B	0.00010 B			
Nickel	0.40 U	1.3 B	0.4 U	1.0 B	1.3 B	1.6 B	4.1 B	0.0031 B	0.010 B	0.013 B			
Potassium	3,450 J	3,750 J	3,340 J	3,480 B	3,490 J	3,530 B	3,740 B	2.81 B	5.60	4.09 B			
Selenium	3.1 UJ	3.1 U	3.3 R	3.3 U	3.3 U	3.3 U	5.0 U	0.0050 U	0.0050 U	0.0050 U			
Silver	0.40 U	0.40 U	0.5 B	0.5 U	0.5 U	0.5 U	10 U	0.010 U	0.010 U	0.010 U			
Sodium	27,000 J	23,800 J	23,400	27,900	25,000	24,300	26,600	23.3	23.0	24.4			
Thallium	1.8 U	1.8 U	1.5 UJ	6.4 J	1.5 UJ	1.5 UJ	2.7 B	0.0020 BJ	0.010 UJ	0.010 U			
Vanadium	12.3 B	5.0 B	1.0 U	4.0 B	1.0 U	8.2 B	11 J	0.0055 B	0.0036 B	0.013 B			
Zinc	0.50 U	0.50 UJ	4.3 U	4.3 U	4.3 U	4.3 U	8.2 B	0.0066 B	0.0047 B	0.027			
<b>Volatile Organic Compounds (VOCs)</b>													
<b>Semi-Volatile Organic Compounds (SVOCs)</b>													
<b>Pesticides / PCBs</b>													

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Results in BOLD indicate a detection above the Contract Required Quantitation Limit (CRQL). An analyte is only bolded if there is a corresponding Trigger Level.
- 4) Results shaded yellow, BOLD, and red with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry or Insufficient Volume)
- 7) U = Indicates compound was analyzed for but not detected.
- 8) B = (Inorganics) Indicates the result is between the Reporting Detection Limit (RDL) and Method Detection Limit (MDL) but below CRQL.
- 9) B = (Organics) Indicates the analyte was detected in the Method Blank.
- 10) UJ = A value less than the CRQL but greater than the MDL.
- 11) J = The analyte was positively identified; the associated numerical value is the estimated concentration of analyte in the sample.
- 12) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 13) CRQL = Contract Required Quantitation Limit
- 14) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 15) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.
- 16) Sampling frequency reduced to semi-annual as per petition report dated 5/15/08 and EPA approval letter dated 11/24/09.
- 17) NS= no sampling required for that event

**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for GW-59**

Compound	Sep-08	Dec-08	Feb-09	Jun-09	Sep-09	Dec-09	Mar-10	Sep-10	Mar-11	Sep-11	Trigger Level	CRQL
<b>Quarterly Sampling Results (All Results Expressed in Units of µg/l)</b>												
<b>Inorganics - Metals (Dissolved)<sup>14</sup></b>												
Aluminum	15.3 U	15.3 U	29.9 B	26.9 U	61.7 B	121 B	50 B	0.12 B	0.20 U	0.032 BJ		200
Antimony	1.6 U	1.6 U	4.8 U	4.8 U	4.8 U	4.8 U	60 U	0.060 U	0.060 U	0.060 U	60	60
Arsenic	2.5 U	4.6 J	3.6 U	3.6 U	3.6 UJ	3.6 UJ	5.1 B	0.0068 B	0.010 U	0.010 U	20	10
Barium	45,400 B	38.3 B	46.6 B	35.0 B	42.0 B	33.3 B	28 B	0.041 B	0.038 B	0.048 B	1,000	200
Beryllium	0.10 U	0.10 U	2.3 U	2.3 U	2.3 U	2.3 U	5.0 UJ	0.0050 UJ	0.0050 U	0.0050 U	5	5
Cadmium	0.10 U	0.10 U	0.2 U	0.2 U	0.2 U	0.2 U	5.0 U	0.0044 B	0.0050 U	0.0050 U	5	5
Calcium	208,000 U	189,000 J	191,000	180,000	204,000	163,000	159,000	179 J	162 J	167		5,000
Chromium	0.20 U	0.20 U	3.3 B	0.4 U	0.4 UJ	2.8 B	10 U	0.010 U	0.010 U	0.010 U	11	10
Cobalt	0.30 U	0.30 U	0.5 U	0.5 U	0.5 U	0.5 U	50 U	0.0019 B	0.050 U	0.050 U		50
Copper	3.3 B	0.60 U	5.4 B	5.9 B	6.9 B	4.9 B	7.0 B	0.025 U	0.010 B	0.010 B	25	25
Iron	8.1 U	53.0 B	5.3 U	5.3 U	5.3 U	24.8 B	100 U	0.41	0.10 U	0.10 U	7,000	100
Lead	1.6 B	1.2 U	1.6 UJ	1.6 U	4.3 J	4.5*	2.9 J	0.0030 U	0.0024 J	0.0030 U	4.2	3
Magnesium	43,200 J	43,100 J	37,400	29,800	41,600	26,500	26,200	34.5 J	29.7	38.7		5,000
Manganese	0.20 UJ	0.20 U	0.5 U	0.5 U	0.5 UJ	0.5 U	15 U	0.034	0.0023 B	0.0025 B		15
Mercury	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 B	0.00020 U	0.00013 B	0.00020 U	0.2	0.2
Nickel	0.40 U	0.40 U	0.4 U	0.4 U	0.4 U	0.4 U	1.2 B	0.0044 B	0.014 B	0.040 U	96	40
Potassium	17,800	12,200 J	16,700	19,700	18,900	15,500	11,100	13.8	15.7	16.8		5,000
Selenium	3.1 U	3.1 UJ	3.7 J	3.3 UJ	3.3 U	3.3 U	5.0 U	0.0050 U	0.0050 U	0.0050 U	5	5
Silver	0.50 B	0.40 U	0.9 B	0.5 U	0.5 U	0.5 U	10 U	0.010 U	0.010 U	0.010 U	10	10
Sodium	95,500 J	90,500 J	83,100	60,700	105,000	51,700	46,600	81.7	62.7	91.2		5,000
Thallium	3.7 B	1.8 U	1.5 R	1.5 U	1.5 UJ	1.5 UJ	10 U	0.0052 BJ	0.010 UJ	0.010 U	40	10
Vanadium	14.0 B	3.2 B	1.0 U	4.9 B	1.0 U	7.4 B	11 J	0.0060 B	0.0018 B	0.012 B		50
Zinc	0.50 U	0.50 UJ	4.3 U	7.3 B	4.3 U	4.3 U	20 U	0.020 U	0.020 U	0.020 U	86	20
<b>Inorganics - Metals and Cyanide (Total)</b>												
Aluminum	674	578 J	251 J	35.1 B	70.9 J	308	82 B	0.20 U	0.20 U	0.043 B		
Antimony	1.6 U	1.6 U	4.8 U	4.8 U	4.8 U	4.8 U	60 U	0.0037 B	0.0047 B	0.060 U		
Arsenic	2.5 U	6.7 B	5.3 J	3.6 U	3.6 UJ	3.6 UJ	10 U	0.0085 B	0.010 U	0.010 U		
Barium	60.3 J	53.9 J	50.0 J	35.7 B	37.4 B	39.8 B	28 B	0.038 BJ	0.045 B	0.048 B		
Beryllium	0.10 U	0.10 U	2.3 U	2.3 U	2.3 U	2.3 U	5.0 UJ	0.0050 U	0.0050 U	0.0050 U		
Cadmium	0.10 UJ	0.10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	5.0 U	0.0046 B	0.0050 U	0.0050 U		
Calcium	209,000 J	207,000 J	203,000	187,000	185,000	180,000	158,000	180 J	173 J	186		
Chromium	0.20 U	0.20 B	2.7 B	0.4 U	0.4 UJ	2.2 B	10 U	0.010 U	0.010 U	0.00036 B		
Cobalt	1.1 B	0.30 U	0.5 U	0.5 U	0.5 U	0.5 U	50 U	0.0015 B	0.050 U	0.050 U		
Copper	4.8 B	0.60 U	7.3 B	8.2 B	6.8 B	7.1 B	7.3 B	0.025 U	0.025 U	0.011 B		
Cyanide	3.9 B	0.60 U	0.2 U	0.2 U	1.6 U	3.0 B	5.0 U	0.0027 B	0.0006 B	0.0012 B	10	10
Iron	2,430 J	1,620	671	20.2 J	86.0 J	854	30 B	0.23	0.10 UJ	0.048 B		
Lead	3.8 J	3.0 UJ	1.6 UJ	1.6 U	1.6 U	4.8 J	2.1 J	0.0030 U	0.0016 J	0.0030 U		
Magnesium	425,000 J	45,200 J	36,900	31,300	34,800	27,900	25,100	34.8 J	28.1	38.1		
Manganese	181 J	94.8	30.5	0.9 J	7.3 B	36.4	6.0 B	0.016	0.0050 J	0.012 B		
Mercury	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 B	0.20 U	0.00020 U	0.00015 B	0.00020 U		
Nickel	1.5 B	0.90 B	0.4 U	0.4 U	0.4 U	0.4 U	40 U	0.0037 B	0.015 B	0.040 U		
Potassium	19,600 J	12,900 J	18,200 J	21,200	25,400 J	14,100	9,920	14.3	16.0	17.4		
Selenium	3.1 UJ	3.1 U	3.3 R	3.3 UJ	3.3 U	3.3 U	5.0 U	0.0050 U	0.0050 U	0.0050 U		
Silver	0.40 U	0.40 U	1.0 B	0.5 U	0.5 U	0.5 U	10 U	0.010 U	0.010 U	0.010 U		
Sodium	95,300 J	93,600 J	77,900	61,800	86,500	54,800	41,800	81.8	51.7	89.7		
Thallium	1.8 J	1.8 U	1.5 UJ	1.5 U	1.5 UJ	1.5 UJ	10 U	0.0057 BJ	0.010 UJ	0.010 U		
Vanadium	9.3 B	5.5 B	1.0 U	7.3 B	1.0 U	6.9 B	8 J	0.0064 B	0.0010 B	0.012 B		
Zinc	0.50 U	0.50 UJ	4.3 U	5.9 B	4.3 U	4.3 U	20 U	0.020 U	0.020 U	0.020 U		
<b>Volatile Organic Compounds (VOCs)</b>	BRL	BRL	BRL	BRL	BRL	BRL	BRL	NS	BRL	NS		
<b>Semi-Volatile Organic Compounds (SVOCs)</b>	BRL	BRL	BRL	BRL	BRL	BRL	BRL	NS	BRL	NS		
<b>Pesticides / PCBs</b>	BRL	BRL	BRL	BRL	BRL	BRL	BRL	NS	BRL	NS		

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Results in BOLD indicate a detection above the Contract Required Quantitation Limit (CRQL). An analyte is only bolded if there is a corresponding Trigger Level.
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- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry or Insufficient Volume)
- 7) U = Indicates compound was analyzed for but not detected.
- 8) B = (Inorganics) Indicates the result is between the Reporting Detection Limit (RDL) and Method Detection Limit (MDL) but below CRQL.
- 9) B = (Organics) Indicates the analyte was detected in the Method Blank.
- 10) UJ = A value less than the CRQL but greater than the MDL.
- 11) J = The analyte was positively identified; the associated numerical value is the estimated concentration of analyte in the sample.
- 12) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 13) CRQL = Contract Required Quantitation Limit
- 14) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 15) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.
- \* Field duplicate value of 2.8 was below Trigger Level.
- 16) Sampling frequency reduced to semi-annual as per petition report dated 5/15/08 and EPA approval letter dated 11/24/09.
- 17) NS-no sampling required for that event

**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for GW-60**

Compound	Quarterly Sampling Results (All Results Expressed in Units of µg/l)									TRIGGER LEVEL	CRQL
	Mar-08	Jun-08	Sep-08	Dec-08	Feb-09	Jun-09	Sep-09	Dec-09	Mar-10		
<b>Inorganics - Metals (Dissolved)<sup>14</sup></b>			Insufficient Volume	Insufficient Volume						Sampling no longer required - see note 16	
Aluminum	15.4 U	15.3 U	—	—	28.6 B	26.9 U	65.6 B	109 B			200
Antimony	2.4 U	1.6 U	—	—	4.8 U	4.8 U	4.8 U	4.8 U			60
Arsenic	2.4 U	2.5 U	—	—	3.6 U	3.6 U	3.6 UJ	3.6 UJ			20
Barium	64.1 B	87.4 J	—	—	59.9 B	90.5 B	59.3 B	80.4 B			1,000
Beryllium	0.10 U	0.10 U	—	—	2.3 U	2.3 U	2.3 U	2.3 U			5
Cadmium	0.10 U	0.10 U	—	—	0.2 U	0.2 U	0.2 U	0.2 U			5
Calcium	160,000	124,000 J	—	—	153,000	259,000	139,000	244,000			5,000
Chromium	1.2 B	1.4 B	—	—	2.7 B	0.8 B	0.4 UJ	3.8 B			11
Cobalt	0.20 U	0.30 U	—	—	0.5 U	0.5 U	1.7 B	0.5 U			50
Copper	3.80 B	3.6 B	—	—	5.7 B	8.9 B	6.1 B	8.3 B			25
Iron	8.5 U	8.1 U	—	—	5.3 U	13.2 B	2,420	130			7,000
Lead	0.80 U	2.9 B	—	—	1.6 UJ	2.2 B	2.4 J	3.6			4.2
Magnesium	23,800	16,100 J	—	—	35,500	68,900	33,500	61,300			5,000
Manganese	0.30 U	0.20 U	—	—	0.5 U	0.5 U	742 J	1.4 B			15
Mercury	0.10 U	0.10 UJ	—	—	0.1 U	0.1 U	0.1 U	0.1 U			0.2
Nickel	0.40 U	0.40 U	—	—	0.4 U	0.4 U	1.7 B	0.4 U			96
Potassium	6,650	9,980	—	—	6,120	7,220	5,980	5,020			5,000
Selenium	3.9 U	3.2 B	—	—	3.3 UJ	3.3 UJ	3.3 U	3.3 U			8.5
Silver	0.30 U	0.40 U	—	—	1.2 B	0.5 U	0.5 U	0.5 U			10
Sodium	15,100	7,300 J	—	—	11,900	20,100	9,840	19,300			5,000
Thallium	4.3 B	1.8 U	—	—	1.5 R	1.5 U	1.5 UJ	1.5 UJ			40
Vanadium	1.6 B	4.3 B	—	—	1.0 U	10.5 B	1.0 U	8.1 B			50
Zinc	9.1 B	10.1 B	—	—	4.3 U	10.8 B	4.3 U	4.3 U			86
<b>Inorganics - Metals and Cyanide</b>											
(Total)											
Aluminum	110 J	127 B	—	—	355 J	9,420	18,100 J	426			
Antimony	2.4 U	1.6 U	—	—	4.8 U	4.8 U	4.8 U	4.8 U			
Arsenic	2.4 UJ	2.5 U	—	—	3.6 U	3.6 U	3.6 UJ	3.6 UJ			
Barium	68.6 B	88.4 J	—	—	66.7 J	123 B	125 B	63.4 B			
Beryllium	0.10 U	0.10 U	—	—	2.3 U	2.3 U	2.3 U	2.3 U			
Cadmium	0.10 U	0.10 U	—	—	0.2 U	0.2 B	3.6 B	0.2 U			
Calcium	144,000	122,000 J	—	—	168,000	244,000	146,000	220,000			
Chromium	1.9 B	1.8 B	—	—	2.9 B	19.8	0.4 UJ	2.8 B			
Cobalt	0.20 U	0.30 U	—	—	0.5 U	8.2 B	18.5 B	0.5 U			
Copper	9.10 B	5.3 B	—	—	8.1 B	20.1 B	39.0 J	8.1 B			
Cyanide	0.60 U	0.60 U	—	—	218	0.2 U	—	4.8 B			10
Iron	285	307	—	—	816	21,800 J	42,000 J	648			
Lead	0.80 UJ	1.5 B	—	—	1.6 UJ	10.9	29.4 J	3.8 J			
Magnesium	21,500	16,400 J	—	—	37400	65800	35100	47700			
Manganese	6.6 B	15.5	—	—	25	726 J	1,160	21.5			
Mercury	0.10 U	0.10 UJ	—	—	0.1 U	0.1 U	0.1 U	0.2 B			
Nickel	0.40 U	0.40 U	—	—	0.4 U	18.3 B	36.7 B	0.4 U			
Potassium	7,430 J	9,910	—	—	6,760 J	8,030	9,800 J	4,810 B			
Selenium	3.9 U	3.6 B	—	—	3.3 R	3.3 UJ	3.3 U	3.3 U			
Silver	0.30 U	0.40 U	—	—	0.6 B	0.5 U	0.5 U	0.5 U			
Sodium	13,200	7,450 J	—	—	12,700	17,500	6,900	16,600			
Thallium	2.7 B	1.8 U	—	—	1.5 UJ	1.5 U	1.5 UJ	1.5 UJ			
Vanadium	1.0 U	4.6 B	—	—	1.0 U	29.1 B	26.3 U	6.3 B			
Zinc	15.4 J	12.6 B	—	—	4.3 U	63.9	111	4.3 U			
<b>Volatile Organic Compounds (VOCs)</b>	BRL	BRL	—	—	BRL	BRL	BRL	BRL			
<b>Semi-Volatile Organic Compounds (SVOCs)</b>	BRL	BRL	—	—	—	—	—	BRL			
<b>Pesticides / PCBs</b>	BRL	BRL	—	—	—	BRL	—	BRL			

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Results in BOLD indicate a detection above the Contract Required Quantitation Limit (CRQL). An analyte is only bolded if there is a corresponding Trigger Level.
- 4) Results shaded yellow, BOLD, and red with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry or Insufficient Volume)
- 7) U = Indicates compound was analyzed for but not detected.
- 8) B = (Inorganics) Indicates the result is between the Reporting Detection Limit (RDL) and Method Detection Limit (MDL) but below CRQL.
- 9) B = (Organics) Indicates the analyte was detected in the Method Blank.
- 10) UJ = A value less than the CRQL but greater than the MDL.
- 11) J = The analyte was positively identified; the associated numerical value is the estimated concentration of analyte in the sample.
- 12) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 13) CRQL = Contract Required Quantitation Limit
- 14) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 15) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.
- 16) Sampling of this well is no longer required based on petition report dated 05/15/08 and EPA approval letter dated 11/24/09.

**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for GW-61**

Compound	Dec-08	Feb-09	Jun-09	Sep-09	Dec-09	Mar-10	Sep-10	Mar-11	Sep-11	Trigger Level	CRQL
<b>Inorganics - Metals (Dissolved)<sup>14</sup></b>											
Aluminum	32.4 B	26.9 U	26.9 U	26.9 U	37.7 B	200 U	0.2 U	0.20 U	0.036 BJ		200
Antimony	1.6 U	4.8 U	4.8 U	4.8 U	4.8 U	60 U	0.0093 B	0.060 U	0.0052 B	60	60
Arsenic	2.5 U	3.6 U	3.6 U	3.6 UJ	3.6 UJ	10 U	0.012	0.0048 J	0.010 U	20	10
Barium	28.7 B	19.1 B	21.2 B	24.1 B	31.3 B	18 B	0.025 BJ	0.017 B	0.045 B	1,000	200
Beryllium	0.10 U	2.3 U	2.3 U	2.3 U	2.3 U	5.0 UJ	0.0050 U	0.0050 U	0.0050 U	5	5
Cadmium	0.10 U	0.2 U	0.2 B	0.6 B	0.5 B	5.0 U	0.0011 B	0.0050 U	0.00041 B	5	5
Calcium	322,000 J	469,000	471,000	296,000	332,000	421,000	374 J	396 J	332		5,000
Chromium	0.2 U	4.9 B	0.8 B	0.4 UJ	3.7 B	10 U	0.010 U	0.010 U	0.010 U	11	10
Cobalt	1.5 B	1.1 B	1.2 B	0.9 B	0.8 B	0.70 B	0.0035 B	0.0011 B	0.00063 B		50
Copper	0.60 U	6.9 B	9.9 B	10.4 B	12.4 B	14 B	0.025 U	0.025 U	0.014 B	25	25
Iron	713	645	17.9 B	5.3 U	1910	100 U	2.81	2.09	0.10 U	5,000	100
Lead	1.2 U	1.6 UJ	2.1 B	5.1 J	3.6	2.7 J	0.0015 B	0.0030 UJ	0.0030 U	4.2	3
Magnesium	74,400 J	93,200	101,000	65,400	79,000	99,100	91.2 J	86.0	71.0		5,000
Manganese	881	433	328	409 J	425	86	0.51	0.38	0.37		15
Mercury	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.20 U	0.00020 U	0.00014 B	0.00020 U	0.2	0.2
Nickel	4.3 B	4.6 B	7.3 B	6.0 B	6.5 B	5.0 B	0.010 B	0.034 B	0.0052 B	96	40
Potassium	10,700 J	14,500	16,600	12,500	12,100	12,800	11.4	10.7	11.8		5,000
Selenium	3.1 UJ	3.3 U	3.3 UJ	3.3 U	3.3 U	5.0 U	0.0050 U	0.0050 U	0.0050 U	8.5	5
Silver	0.70 B	2.1 B	0.5 U	0.5 U	0.5 U	10 U	0.010 U	0.010 U	0.010 U	10	10
Sodium	98,200 J	66,100	74,300	72,000	92,800	71,000	112	52.3	53.7		5,000
Thallium	1.8 U	1.5 R	1.5 U	1.5 UJ	1.5 UJ	10 U	0.0047 BJ	0.010 UJ	0.010 U	40	10
Vanadium	5.4 B	1.0 U	12.5 B	1.0 U	10.8 B	16 J	0.0055 B	0.0011 B	0.013 B		50
Zinc	0.50 UJ	4.3 U	4.3 U	4.3 U	4.3 U	20 U	0.020 U	0.020 U	0.016 B	86	20
<b>Inorganics - Metals and Cyanide (Total)</b>											
Aluminum	225 J	32.2 J	131.0 B	107.0 J	8620	47 B	0.20 U	0.20 U	0.60		
Antimony	1.6 U	4.8 U	4.8 U	4.8 U	4.8 U	60 U	0.0098 B	0.060 U	0.060 U		
Arsenic	2.5 U	3.6 U	3.6 U	3.6 UJ	3.6 UJ	4.3 B	0.012	0.010 U	0.010 U		
Barium	37.2 J	17.5 J	20.1 B	25.1 B	122 B	16 B	0.026 BJ	0.018 B	0.046 B		
Beryllium	0.10 U	2.3 U	2.3 U	2.3 U	2.3 U	5.0 UJ	0.0050 U	0.0050 U	0.0050 U		
Cadmium	0.10 UJ	0.2 U	0.2 U	0.3 B	2.3 B	5.0 U	0.0010 B	0.0050 U	0.0050 U		
Calcium	312,000 J	457,000	443,000	340,000	401,000	396,000	349 J	409 J	321		
Chromium	0.20 U	4.7 B	1.1 B	0.4 UJ	0.4 U	10 U	0.010 U	0.010 U	0.0013 B		
Cobalt	0.30 U	0.8 B	0.9 B	1.0 B	8.2 B	0.87 B	0.0031 B	0.00050 B	0.00066 B		
Copper	1.3 B	7.5 B	13.8 B	11.5 B	23.1 B	13 B	0.025 U	0.025 U	0.015 B		
Cyanide	0.60 U	196	0.2 U	1.6 U	1.9 B	5.0 U	0.0050 U	0.0029 B	0.0009 B	10	10
Iron	934	161	1,080 J	925 J	32900	220	0.26	0.21	0.90		
Lead	3.0 UJ	1.6 U	2.7 B	2.7 J	16.9 J	2.4 J	0.0030 U	0.0025 J	0.0030 U		
Magnesium	65,000 J	89,300	92,100	74,100	96,900	89,800	78.9 J	84.4	65.2		
Manganese	106	336	253 J	418	896	78	0.12	0.28	0.16		
Mercury	0.10 U	0.1 U	0.1 U	0.1 U	0.2	0.20 U	0.00020 U	0.00012 B	0.00020 U		
Nickel	4.8 B	3.4 B	7.0 B	5.5 B	23.9 B	4.2 B	0.010 B	0.035 B	0.0054 B		
Potassium	11,700 J	14,700 J	15,500	13,500 J	14,000	11,600	12.3	11.2	11.7		
Selenium	3.1 U	3.3 R	3.3 UJ	3.3 U	3.3 U	5.0 U	0.0050 U	0.0050 U	0.0050 U		
Silver	0.50 B	2.1 B	0.5 U	0.5 U	0.5 U	10 U	0.010 U	0.010 U	0.010 U		
Sodium	65,000 J	57,000	67,900	83,800	94,500	51,700	81.2	37.2	49.9		
Thallium	1.8 U	1.5 U	1.5 U	1.5 UJ	1.5 UJ	10 U	0.0072 BJ	0.0100 UJ	0.010 U		
Vanadium	5.6 B	1.0 U	14.4 B	1.0 U	20.4 B	13 J	0.0051 B	0.050 U	0.016 B		
Zinc	0.50 UJ	4.3 U	7.4 B	4.3 U	55.6	20 U	0.0049 B	0.020 U	0.0093 B		
<b>Volatile Organic Compounds (VOCs)</b>											
<b>Semi-Volatile Organic Compounds (SVOCs)</b>											
<b>Pesticides / PCBs</b>											

Notes:

- 1) All results expressed in micrograms per liter ( $\mu\text{g/L}$ ).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Results in BOLD indicate a detection above the Contract Required Quantitation Limit (CRQL). An analyte is only bolded if there is a corresponding Trigger Level.
- 4) Results shaded yellow, BOLD, and red with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry or Insufficient Volume)
- 7) U = Indicates compound was analyzed for but not detected.
- 8) B = (Inorganics) Indicates the result is between the Reporting Detection Limit (RDL) and Method Detection Limit (MDL) but below CRQL.
- 9) B = (Organics) Indicates the analyte was detected in the Method Blank.
- 10) UJ = A value less than the CRQL but greater than the MDL.
- 11) J = The analyte was positively identified; the associated numerical value is the estimated concentration of analyte in the sample.
- 12) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 13) CRQL = Contract Required Quantitation Limit
- 14) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 15) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.
- 16) Sampling frequency reduced to semi-annual as per petition report dated 5/15/08 and EPA approval letter dated 11/24/09.
- 17) NS-no sampling required for that event

**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for GW-62A**

Compound	Quarterly Sampling Results (All Results Expressed in Units of µg/L)									Sampling no longer required - see note 16	Trigger Level	CRQL
	Mar-08	Jun-08	Sep-08	Dec-08	Feb-09	Jun-09	Sep-09	Dec-09	Mar-10			
<b>Inorganics - Metals (Dissolved)<sup>14</sup></b>												
Aluminum	15.4 U	15.3 U	15.3 U	15.3 U	26.9 U	26.9 U	65.1 B	97.7 B			200	
Antimony	2.4 U	1.6 U	1.6 U	1.6 U	4.8 U	4.8 U	4.8 U	4.8 U		60	60	
Arsenic	2.4 U	2.5 U	2.5 UJ	2.5 U	3.6 U	3.6 U	3.6 UJ	3.6 UJ		20	10	
Barium	101 B	88.9 J	98.9 B	97.8 B	105 B	108 B	110 B	110 B		1,000	200	
Beryllium	0.10 U	0.10 U	0.10 U	0.10 U	2.3 U	2.3 U	2.3 U	2.3 U		5	5	
Cadmium	0.10 U	0.10 U	0.10 U	0.10 U	0.2 U	0.7 B	0.6 B	0.8 B		5	5	
Calcium	119,000	114,000 J	127,000	115,000 J	111,000	128,000	126,000	122,000			5,000	
Chromium	0.40 B	2.5 B	0.20 U	0.20 U	2.9 B	0.4 U	0.4 UJ	2.8 B		11	10	
Cobalt	0.20 U	0.30 U	0.30 U	0.30 U	0.5 U	0.5 U	0.5 U	0.5 U			50	
Copper	4.6 B	4.7 B	3.5 B	0.60 U	6.1 B	7.5 B	7.5 B	14.4 B		25	25	
Iron	8.5 U	8.1 U	8.1 U	8.1 U	5.3 U	5.3 U	20.8 B	121		7,000	100	
Lead	0.80 U	2.8 B	1.3 B	1.2 U	1.6 UJ	2.9 B	1.9 J	19.9		4.2	3	
Magnesium	44,000	40,700 J	46,300 J	41,100 J	41,200	43,800	43,700	43,300			5,000	
Manganese	0.30 U	0.20 U	33.4 J	2.3 B	120	3.3 B	0.5 UJ	1.8 B			15	
Mercury	0.10 U	0.10 UJ	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U			0.2	0.2
Nickel	0.40 U	0.40 U	0.40 U	0.40 U	0.4 U	0.4 U	0.4 U	0.4 U		96	40	
Potassium	7,220	6,200	7,300	6,740 J	7,180	6,470	6,670	6,710			5,000	
Selenium	3.9 U	3.1 U	3.1 UJ	3.1 UJ	3.3 UJ	3.3 UJ	3.3 U	3.3 U		8.5	5	
Silver	0.30 U	0.40 U	0.40 U	0.40 U	1.0 B	0.5 U	0.5 U	0.5 U		10	10	
Sodium	103,000	96,300 J	106,000 J	101,000 J	104,000	102,000	103,000	104,000			5,000	
Thallium	5.5 B	1.8 U	1.8 U	1.8 U	1.5 R	1.5 U	1.5 UJ	1.5 UJ		40	10	
Vanadium	2.5 B	12.4 B	11.5 B	3.3 B	1.0 U	7.9 B	1.0 U	7.9 B			50	
Zinc	7.9 B	14.4 B	0.50 U	0.50 UJ	4.3 U	9.1 B	4.3 U	4.3 U		86	20	
<b>Inorganics - Metals and Cyanide (Total)</b>												
Aluminum	5,190 J	228	192 B	1,190 J	483 J	648	2,650 J	625				
Antimony	2.4 U	1.6 U	1.6 U	1.6 U	4.8 U	4.8 U	4.8 U	4.8 U				
Arsenic	2.4 UJ	2.5 UJ	2.5 U	4.0 B	3.6 U	3.6 U	3.6 UJ	3.6 UJ				
Barium	218	95.4 J	107 J	108 J	125 J	119 B	157 B	113 B				
Beryllium	0.20 B	0.10 U	0.10 U	0.10 U	2.3 U	2.3 U	2.3 U	2.3 U				
Cadmium	0.10 U	0.10 U	0.10 UJ	0.10 UJ	0.2 U	0.8 B	1.3 B	1.0 B				
Calcium	166,000	117,000 J	134,000 J	119,000 J	127,000	128,000	138,000	129,000				
Chromium	15.3	3.3 B	0.20 U	1.6 B	3.9 B	3.2 B	0.4 UJ	3.5 B				
Cobalt	5.6 B	0.30 U	0.30 U	0.30 U	0.5 U	0.5 U	2.0 B	0.5 U				
Copper	14.2 B	6.1 B	6.0 B	1.1 B	7.8 B	11.9 B	12.8 B	13.8 B				
Cyanide	0.60 U	0.60 U	0.90 B	0.60 U	0.2 U	0.2 U	1.6 U	1.6 B		10.0	10.0	
Iron	13,600	629	1,020 J	2,940	1,270	1,850 J	6,640 J	1,180				
Lead	5.9 J	2.0 B	3.3 J	3.0 UJ	1.6 UJ	2.7 B	6.2 J	3.6 J				
Magnesium	54,400	42,800 J	47,100 J	39,800	46,400	42,200	46,500	43,400				
Manganese	395	14.4 B	51.5 J	74.8	159	48.7 J	201.0	30.3				
Mercury	0.10 U	0.10 UJ	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.2				
Nickel	16.0 B	0.80 B	0.40 U	1.9 B	0.7 B	2.5 B	7.7 B	1.0 B				
Potassium	9,290 J	6,610	7,230 J	6,400 J	7,770 J	6,220	7,280 J	6,540				
Selenium	3.9 U	3.1 UJ	3.1 UJ	3.1 U	3.3 R	3.3 U	3.3 U	3.3 U				
Silver	0.30 U	0.40 U	0.40 U	0.40 U	1.0 B	0.5 U	0.5 U	0.5 U				
Sodium	113,000	102,000 J	105,000 J	96,500 J	11,000	99,400	102,000	99,700				
Thallium	3.9 B	1.8 U	1.8 UJ	1.8 U	1.5 UJ	1.5 U	1.5 UJ	1.5 UJ				
Vanadium	8.1 B	12.4 B	9.2 B	4.5 B	1.0 U	8.4 B	1.0 U	8.8 B				
Zinc	53.1 J	14.7 B	0.50 U	0.50 UJ	4.3 U	11.3 B	13.1 B	4.5 B				
<b>Volatile Organic Compounds (VOCs)</b>	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL				
<b>Semi-Volatile Organic Compounds (SVOCs)</b>	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL				
<b>Pesticides / PCBs</b>	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL				

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Results in BOLD indicate a detection above the Contract Required Quantitation Limit (CRQL). An analyte is only bolded if there is a corresponding Trigger Level.
- 4) Results shaded yellow, BOLD, and red with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry or Insufficient Volume)
- 7) U = Indicates compound was analyzed for but not detected.
- 8) B = (Inorganics) Indicates the result is between the Reporting Detection Limit (RDL) and Method Detection Limit (MDL) but below CRQL.
- 9) B = (Organics) Indicates the analyte was detected in the Method Blank.
- 10) UJ = A value less than the CRQL but greater than the MDL.
- 11) J = The analyte was positively identified; the associated numerical value is the estimated concentration of analyte in the sample.
- 12) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 13) CRQL = Contract Required Quantitation Limit
- 14) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 15) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.
- 16) Sampling of this well is no longer required based on petition report dated 05/15/08 and EPA approval letter dated 11/24/09.

**Skinner Landfill  
West Chester, Ohio**  
**Groundwater Analysis Summary Table for GW-62B**

Compound	Quarterly Sampling Results (All Results Expressed in Units of mg/l)								Trigger Level	CRQL
	Mar-08	Jun-08 ##	Dec-08	Feb-09	Jun-09	Sep-09	Dec-09	Mar-10		
<b>Inorganics - Metals (Dissolved)<sup>14</sup></b>										
Aluminum	200.0 U	15.9 U	32.9 B	215	26.9 U	—	—	—	Sampling no longer required - see note 16	200
Antimony	60.0 U	1.6 U	1.6 U	4.8 U	4.8 U	—	—	—	60	60
Arsenic	10.0 U	2.5 UJ	2.5 U	3.6 U	3.6 U	—	—	—	20	10
Barium	21.9 B	41.8 B	227	32.3 B	49.5 B	—	—	—	1,000	200
Beryllium	5.0 U	0.10 U	0.1 U	2.3 U	2.3 U	—	—	—	5	5
Cadmium	5.0 U	0.10 U	0.1 U	0.2 U	0.2 U	—	—	—	5	5
Calcium	239,000	273,000	310,000 J	248000	345000	—	—	—	—	5,000
Chromium	0.50 B	3.3 U	0.2 U	3.7 B	0.7 B	—	—	—	11	10
Cobalt	50.0 U	0.50 B	10.6 B	1.4 B	0.9 B	—	—	—	—	50
Copper	4.3 B	4.6 U	1.8 B	7.1 B	12.3 B	—	—	—	25	25
Iron	11.5 B	8.1	41.9 B	569	286	—	—	—	7,000	100
Lead	1.2 B	3.1 B	1.2 U	1.6 UJ	2.7 B	—	—	—	4.2	3
Magnesium	48,600	56,700 J	82,300 J	48400	69900	—	—	—	—	5,000
Manganese	15.0 U	223 J	2,700	127	454	—	—	—	—	15
Mercury	0.20 U	0.10 U	0.1 U	0.1 U	0.1 U	—	—	—	0.2	0.2
Nickel	40.0 U	4.6 B	19.5 B	1.3 B	5.4 B	—	—	—	96	40
Potassium	3,220 B	1,000	20,200 J	5430	8480	—	—	—	—	5,000
Selenium	5.0 U	3.1 J	3.1 UJ	3.3 UJ	3.3 U	—	—	—	8.5	5
Silver	0.30 B	0.40 B	0.5 B	1.1 B	0.5 U	—	—	—	10	10
Sodium	33,900	54,500 J	75,400 J	41800	69000	—	—	—	—	5,000
Thallium	3.4 B	1.8 U	1.8 U	1.5 R	1.5 U	—	—	—	40	10
Vanadium	1.7 B	16.0 B	4.7 B	1.0 U	9.9 B	—	—	—	—	50
Zinc	32.3	52.6	32.7 J	25.6	56.6	—	—	—	86	20
<b>Inorganics - Metals and Cyanide (Total)</b>										
Aluminum	1,610 J	1,320 B	—	—	—	—	—	—	—	—
Antimony	60.0 U	1.6 U	—	—	—	—	—	—	—	—
Arsenic	10.0 UJ	2.5 U	—	—	—	—	—	—	—	—
Barium	31.2 B	43.4 J	—	—	—	—	—	—	—	—
Beryllium	0.10 B	0.10 U	—	—	—	—	—	—	—	—
Cadmium	5.00 U	0.10 UJ	—	—	—	—	—	—	—	—
Calcium	242,000	270,000 J	—	—	—	—	—	—	—	—
Chromium	3.5 B	5.1 U	—	—	—	—	—	—	—	—
Cobalt	1.4 B	1.7 B	—	—	—	—	—	—	—	—
Copper	7.2 B	13.0 U	—	—	—	—	—	—	—	—
Cyanide	10.0 U	0.60 —	—	—	—	—	—	—	10.0	10.0
Iron	6,820	3,970 J	—	—	—	—	—	—	—	—
Lead	1.8 J	4.6 UJ	—	—	—	—	—	—	—	—
Magnesium	49,800	59,300 J	—	—	—	—	—	—	—	—
Manganese	155	461 J	—	—	—	—	—	—	—	—
Mercury	0.20 U	0.10 U	—	—	—	—	—	—	—	—
Nickel	3.1 B	8.3 B	—	—	—	—	—	—	—	—
Potassium	3,680 J	13,100 J	—	—	—	—	—	—	—	—
Selenium	5.0 U	3.1 J	—	—	—	—	—	—	—	—
Silver	10.0 U	0.40 B	—	—	—	—	—	—	—	—
Sodium	34,000	59,500 J	—	—	—	—	—	—	—	—
Thallium	2.3 B	1.8 UJ	—	—	—	—	—	—	—	—
Vanadium	50.0 U	18.2 B	—	—	—	—	—	—	—	—
Zinc	71.0 J	80.5	—	—	—	—	—	—	—	—
<b>Volatile Organic Compounds (VOCs)</b>										
<b>Semi-Volatile Organic Compounds (SVOCs)</b>										
<b>Pesticides / PCBs</b>										

Notes:

- 1) All results expressed in micrograms per liter ( $\mu\text{g/L}$ ).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Results in BOLD indicate a detection above the Contract Required Quantitation Limit (CRQL). An analyte is only bolded if there is a corresponding Trigger Level.
- 4) Results shaded yellow, BOLD, and red with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry or Insufficient Volume)
- 7) U = Indicates compound was analyzed for but not detected.
- 8) B = (Inorganics) Indicates the result is between the Reporting Detection Limit (RDL) and Method Detection Limit (MDL) but below CRQL.
- 9) B = (Organics) Indicates the analyte was detected in the Method Blank.
- 10) UJ = A value less than the CRQL but greater than the MDL.
- 11) J = The analyte was positively identified; the associated numerical value is the estimated concentration of analyte in the sample.
- 12) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 13) CRQL = Contract Required Quantitation Limit
- 14) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 15) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.
- 16) Sampling of this well is no longer required based on petition report dated 05/15/08 and EPA approval letter dated 11/24/09.

**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for GW-63**

Compound	Quarterly Sampling Result (All Results Expressed in Units of µg/L)										TRIGGER LEVEL	CRQL
	Dec-08	Feb-09	Jun-09	Sep-09	Dec-09	Mar-10	Sep-10	Mar-11	Sep-11			
<b>Inorganics - Metals (Dissolved)<sup>14</sup></b>												
Aluminum	583	38.6 B	26.9 U	32.1 B	144 B	19 B	0.20 U	0.20 U	0.20 U			200
Antimony	1.6 U	4.8 U	4.8 U	4.8 U	4.8 U	60 U	0.0087 B	0.0043 B	0.0049 B	60		60
Arsenic	2.5 U	3.6 U	4.4 B	3.6 UJ	3.6 UJ	6.0 B	0.0076 B	0.0039 J	0.010 U	20		10
Barium	43.4 B	27.1 B	29.7 B	33.2 B	36.7 B	29 B	0.031 BJ	0.026 B	0.047 B	1,000		200
Beryllium	0.10 U	2.3 U	2.3 U	2.3 U	2.3 U	5.0 UJ	0.0050 U	0.0050 U	0.0050 U	5		5
Cadmium	0.10 U	0.2 U	0.6 B	0.2 U	0.2 B	5.0 U	0.0059 B	0.0050 U	0.0050 U	5		5
Calcium	290,000 J	336,000	238,000	227,000	224,000	284,000	250 J	237 J	225			5,000
Chromium	0.20 U	4.9 B	0.9 B	0.4 UJ	2.7 B	10 U	0.010 U	0.010 U	0.010 U	11		10
Cobalt	0.40 B	0.5 U	0.8 B	1.9 B	0.5 U	50 U	0.0050 B	0.0050 U	0.0017 B			50
Copper	1.3 B	7.0 B	7.9 B	7.8 B	8.2 B	12 B	0.025 U	0.025 U	0.014 B	25		25
Iron	1,440	5.3 U	5.3 U	6.2 B	120	10 U	0.51	0.10 U	0.10 U	7,000		100
Lead	1.2 U	1.6 UJ	2.8 B	2.4 J	1.6 U	1.5 J	0.0030 U	0.0030 UJ	0.0030 U	4.2		3
Magnesium	70,200 J	80,000	54,800	52,100	52,100	71,100	59.6 J	56.8	61.2			5,000
Manganese	832	12.2 B	507	1,740 J	639	17	1.78	0.049	1.700			15
Mercury	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.07 B	0.00020 U	0.00014 B	0.00020 U	0.2		0.2
Nickel	3.1 B	0.4 U	2.4 B	2.1 B	1.0 B	40 U	0.0062 B	0.019 B	0.0042 B	96		40
Potassium	6,840 J	5,300	5,820	6,810	6,320	4,440 B	5.08	4.10 B	5.90			5,000
Selenium	3.4 J	4.7 J	3.3 U	3.3 U	3.3 U	5.0 U	0.0050 U	0.0050 U	0.0050 U	8.5		5
Silver	0.40 U	1.7 B	0.5 U	0.5 U	0.5 U	10 U	0.010 U	0.010 U	0.010 U	10		10
Sodium	65,200 J	46,000	38,300	46,500	34,000	31,700	47.3	25.2	47.7			5,000
Thallium	1.8 U	1.5 R	2.1 J	1.5 UJ	1.5 U	10 U	0.010 UJ	0.010 U	0.010 U	40		10
Vanadium	4.5 B	1.0 U	5.5 B	1.0 U	7.9 B	16 J	0.0051 B	0.050 U	0.013 B			50
Zinc	0.50 UJ	4.3 U	4.3 U	4.3 U	4.3 U	20 U	0.020 U	0.020 U	0.020 U	86		20
<b>Inorganics - Metals and Cyanide (Total)</b>												
Aluminum	5,080 J	3,190 J	1,970	5,580 J	760	200 U	0.15 B	0.060 B	0.096 B			
Antimony	1.6 U	4.8 U	4.8 U	4.8 U	4.8 U	60 U	0.00710 B	0.0044 B	0.0600 U			
Arsenic	5.4 B	5.9 J	3.6 U	3.6 UJ	3.6 UJ	10 U	0.0036 B	0.010 U	0.010 U			
Barium	70.3 J	42.1 J	36.0 B	68.5 B	41.0 B	28 B	0.032 BJ	0.028 B	0.049 B			
Beryllium	0.10 U	2.3 U	2.3 U	2.3 U	2.3 U	5.0 UJ	0.0050 U	0.0050 U	0.0050 U			
Cadmium	0.10 UJ	0.2 U	0.9 B	1.2 B	0.3 B	5.0 U	0.00052 B	0.0050 U	0.0050 U			
Calcium	355,000	349,000	230,000	252,000	231,000	250,000	230 J	223 J	252			
Chromium	4.1 B	8.4 B	3.5 B	0.4 UJ	3.2 B	10 U	0.010 U	0.010 U	0.010 U			
Cobalt	4.6 B	1.9 B	1.5 B	5.9 B	1.2 B	50 U	0.0044 B	0.050 U	0.0011 B			
Copper	9.2 B	14.0 B	9.8 B	17.1 B	9.5 B	11 B	0.025 U	0.025 U	0.014 B			
Cyanide	0.70 B	0.2 U	0.2 U	1.6 U	1.6 U	7.6	0.0050 U	0.0050 U	0.0013 B	10		10
Iron	11,200	6,770	3,100 J	13,800 J	1,730	100 J	0.48	0.18	0.26			
Lead	5.6 J	3.1 J	3.4	10.6 J	5.7 J	1.6 B	0.0030 U	0.0017 J	0.0030 U			
Magnesium	83,600 J	82,400	53,400	58,900	52,700	61,600	51.9 J	53.6	58.7			
Manganese	986	331	497 J	1,460	705	13 B	1.40	0.056	1.61			
Mercury	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.20 U	0.00020 U	0.00013 B	0.00020 U			
Nickel	11.6 B	4.4 B	4.5 B	12.9 B	1.9 B	40 U	0.0066 B	0.017 B	0.0030 B			
Potassium	8,170 J	5,990 J	6,350	8,430 J	6,610	4,170 B	6.07	3.87 B	5.88			
Selenium	3.1 U	3.3 R	3.3 U	3.3 U	3.3 U	5.0 U	0.0050 U	0.0050 U	0.0050 U			
Silver	0.40 U	2.2 B	0.5 U	0.5 U	0.5 U	10 U	0.010 U	0.010 U	0.010 U			
Sodium	66,300 J	46,200	35,700	43,900	33,700	27,500	42.3	22.9	46.6			
Thallium	1.8 U	1.5 UJ	1.5 UJ	1.5 UJ	1.5 UJ	10 U	0.0053 BJ	0.010 UJ	0.010 U			
Vanadium	13.8 B	1.0 U	7.9 B	1.0	7.9 B	11 J	0.0054 B	0.0013 B	0.015 B			
Zinc	14.7 J	15.5 B	6.9 B	28.4	4.3 U	20 U	0.020 U	0.020 U	0.020 U			
<b>Volatile Organic Compounds (VOCs)</b>												
<b>Semi-Volatile Organic Compounds (SVOCs)</b>												
<b>Pesticides / PCBs</b>												

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Results in BOLD indicate a detection above the Contract Required Quantitation Limit (CRQL). An analyte is only bolded if there is a corresponding Trigger Level.
- 4) Results shaded yellow, BOLD, and red with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry or Insufficient Volume)
- 7) U = Indicates compound was analyzed for but not detected.
- 8) B = (Inorganics) Indicates the result is between the Reporting Detection Limit (RDL) and Method Detection Limit (MDL) but below CRQL.
- 9) B = (Organics) Indicates the analyte was detected in the Method Blank.
- 10) UJ = A value less than the CRQL but greater than the MDL.
- 11) J = The analyte was positively identified; the associated numerical value is the estimated concentration of analyte in the sample.
- 12) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 13) CRQL = Contract Required Quantitation Limit
- 14) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 15) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.
- 16) Sampling frequency reduced to semi-annual as per petition report dated 5/15/08 and EPA approval letter dated 11/24/09.
- 17) NS= no sampling required for that event

**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for GW-64**

Quarterly Sampling Result (All Results Expressed in Units of µg/l)											<b>Trigger Level</b>	<b>CRQL</b>
Compound	Mar-08	Jun-08	Sep-08	Dec-08	Feb-09	Jun-09	Sep-09	Dec-09	Mar-10			
<b>Inorganics - Metals (Dissolved)<sup>14</sup></b>												
Aluminum	15.4 U	15.3 U	15.3 U	70.3 B	26.2 U	26.9 U	58 B	96.7 B				
Antimony	2.4 U	1.6 U	1.6 U	1.6 U	4.8 U	4.8 U	4.8 U	4.8 U		60	60	
Arsenic	2.4 U	2.5 U	2.5 U	5.8 B	3.6 U	3.6 U	3.6 UJ	3.6 UJ		20	10	
Barium	43.1 B	48.6 J	48.4 B	43.1 B	41.5 B	47.5 B	44.5 B	42.2 B		1,000	200	
Beryllium	0.10 U	0.10 U	0.10 U	0.10 U	2.3 U	2.3 U	2.3 U	2.3 U		5	5	
Cadmium	0.10 U	0.10 U	0.10 U	0.10 U	0.2 U	0.2 U	0.2 U	0.2 U		5	5	
Calcium	166,000	151,000 J	194,000	181,000 J	174,000	182,000	170,000	173,000			5,000	
Chromium	0.4 B	3.3 B	0.20 U	0.20 U	3.8 B	0.6 B	0.4 UJ	3.4 B		11	10	
Cobalt	1.00 B	2.0 B	0.40 B	0.30 U	0.5 U	0.6 B	0.5 U	0.5 U			50	
Copper	2.8 B	3.5 B	0.60 B	0.60 U	5.7 B	7.3 B	8.0 B	7.7 B		25	25	
Iron	8.5 U	8.1 U	8.1 U	160	5.3 U	46.8 B	21 B	213		7,000	100	
Lead	0.80 U	3.2	1.2 U	1.2 U	1.6 UJ	1.6 U	1.7 J	4.3		4.2	3	
Magnesium	54,000	51,500 J	62,900 J	55,100 J	54,500	56,600	50,500	526,000			5,000	
Manganese	1150	2,080	619.0 J	611	398	983	90.6 J	79.3			15	
Mercury	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U		0.2	0.2	
Nickel	2.9 B	4.6 B	4.0 B	2.8 B	0.7 B	2.7 B	0.9 B	1.1 B		96	40	
Potassium	12,400	17,100	17,100	7,600 J	9,160	12,700	5,980	6,390			5,000	
Selenium	3.9 U	3.1 U	3.1 U	3.1 UJ	3.7 J	3.3 UJ	3.3 U	3.3 U		8.5	5	
Silver	0.30 U	0.40 U	0.50 B	0.40 U	0.8 B	0.5 U	0.5 U	0.5 U		10	10	
Sodium	39,400	41,300 J	52,900 J	45,900 J	36,800	42,500	32,700	33,500			5,000	
Thallium	2.9 B	1.8 U	1.8 U	1.8 U	1.5 R	1.5 U	1.5 UJ	1.5 UJ		40	10	
Vanadium	3.2 B	14.3 B	13.6 B	3.5 B	1.0 U	8.7 B	1.0 U	9.4 B			50	
Zinc	7.4 B	10.2 B	0.50 U	0.50 UJ	4.3 U	4.3 U	4.3 U	4.3 U		86	20	
<b>Inorganics - Metals and Cyanide (Total)</b>												
Aluminum	1,730 J	583	333	6670 J	135 J	38.8 B	881.0 J	536				
Antimony	2.4 UJ	1.6 U	1.6 U	1.6 U	4.8 U	4.8 U	4.8 U	4.8 U				
Arsenic	2.4 UJ	2.5 UJ	2.5 U	2.5 B	5.4 J	3.6 U	3.6 UJ	3.6 UJ				
Barium	39.7 B	56.2 J	49.3 J	62.5 B	44.7 J	49.0 B	46.0 B	44.1 B				
Beryllium	0.10 U	0.10 U	0.10 U	0.10 U	2.3 U	2.3 U	2.3 U	2.3 U				
Cadmium	0.10 U	0.10 U	0.10 UJ	0.10 UJ	0.2 U	0.2 U	0.3 B	0.3 B				
Calcium	228,000	167,000 J	206,000 J	198,000 J	195,000	183,000	174,000	178,000				
Chromium	2.3 B	4.8 B	0.20 U	8.4 B	3.6 B	0.9 B	0.4 UJ	3.6 B				
Cobalt	2.4 B	3.8 B	1.6 B	7.9 B	1.1 B	0.5 U	1.1 B	0.5 U				
Copper	5.6 B	5.2 B	1.1 B	4.8 B	10.0 B	7.3 B	8.4 B	7.9 B				
Cyanide	0.60 B	3.0 B	2.1 B	1.4 B	0.2 U	0.2 U	1.6 U	1.6 U		10	10	
Iron	2,690	2,030	1,300 J	14,500	405	1,160 J	2,330 J	1,250				
Lead	0.8 UJ	1.8 B	2.9 J	3.3 J	1.6 UJ	2.2 B	4.1 J	4.1 J				
Magnesium	64,800	56,700 J	66,000 J	59,300 J	61,600	55,900	49,400	52,800				
Manganese	1,200	2,690	793 J	1,330	646	867 J	695	233				
Mercury	0.10 U	0.10 UJ	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U				
Nickel	4.4 B	7.0 B	6.3 B	13.9 B	2.2 B	1.7 B	2.6 B	0.6 B				
Potassium	10,400 J	20,800	20,400 J	9,480 J	12,500 J	11,900	6,440 J	6,700				
Selenium	3.9 U	3.1 UJ	3.1 UJ	3.1 U	3.3 R	3.3 UJ	3.3 U	3.3 U				
Silver	0.30 U	0.40 U	0.40 U	0.40 U	1.0 B	0.5 U	0.5 U	0.5 U				
Sodium	38,200	47,400 J	59,000 J	45,300 J	44,200	41,000	32,500	33,700				
Thallium	2.7 B	1.8 U	1.8 UJ	1.8 U	1.5 UJ	1.5	1.5 UJ	1.5 UJ				
Vanadium	1.0 U	18.3 B	9.2 B	12.8 B	1.0 U	7.5	1.0 U	8.4 B				
Zinc	22.3 J	14.0 B	0.50 U	14.7 J	4.3 U	13.9	4.3 U	4.3 U				
<b>Volatile Organic Compounds (VOCs)</b>	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL			
<b>Semi-Volatile Organic Compounds (SVOCs)</b>	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL			
<b>Pesticides / PCBs</b>	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL			

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Results in BOLD indicate a detection above the Contract Required Quantitation Limit (CRQL). An analyte is only bolded if there is a corresponding Trigger Level.
- 4) Results shaded yellow, BOLD, and red with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry or Insufficient Volume)
- 7) U = Indicates compound was analyzed for but not detected.
- 8) B = (Inorganics) Indicates the result is between the Reporting Detection Limit (RDL) and Method Detection Limit (MDL) but below CRQL.
- 9) B = (Organics) Indicates the analyte was detected in the Method Blank.
- 10) UJ = A value less than the CRQL but greater than the MDL.
- 11) J = The analyte was positively identified; the associated numerical value is the estimated concentration of analyte in the sample.
- 12) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 13) CRQL = Contract Required Quantitation Limit
- 14) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 15) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.
- 16) Switch to different format for fourth quarter 2007
- 17) Sampling of this well is no longer required based on petition report dated 05/15/08 and EPA approval letter dated 11/24/09.

**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for GW-65**

Compound	Dec-08	Feb-09	Jun-09	Sep-09	Dec-09	Mar-10	Sep-10	Mar-11	Sep-11	Quarterly Sampling Results (All Results Expressed in Units of µg/l)	
										Trigger Level	CRQL
<b>Inorganics - Metals (Dissolved)<sup>14</sup></b>	Insufficient Volume			Insufficient Volume							
Aluminum	—	38.2 B	26.9 U	—	105.0 B	110 B	6.07	0.20 U	0.034 UJ		200
Antimony	—	4.8 U	4.8 U	—	4.8 U	60 U	0.0062 B	0.060 U	0.060 U	60	60
Arsenic	—	3.6 U	3.6 U	—	3.6 UJ	10 U	0.018	0.010 U	0.010 U	10	10
Barium	—	19.3 B	20.3 B	—	21 B	17 B	##### BEJ	0.023 B	0.029 B	1,000	200
Beryllium	—	2.3 U	2.3 U	—	2.3 U	5.0 UJ	0.002 B	0.0050 U	0.0050 U	5	5
Cadmium	—	0.2 U	0.5 B	—	0.3 B	5.0 U	0.0013 B	0.0050 U	0.00015 B	5	5
Calcium	—	187000	204000	—	201,000	160,000	240.0 J	113.0 J	144		5,000
Chromium	—	7.7 B	2.8 B	—	6.7 B	10 U	0.042 B	0.010 U	0.00068 B	11	10
Cobalt	—	0.5 U	0.5 U	—	0.5 U	50 U	0.010 B	0.050 U	0.050 U		50
Copper	—	5.1 B	9.3 B	—	10.6 B	13 B	0.0066 B	0.025 U	0.014 B	25	25
Iron	—	5.3 U	5.9 B	—	283	110	13.8	0.10 U	0.23	5,000	100
Lead	—	1.6 UJ	2.3 B	—	4.8 J	2.3 J	0.0073	0.0030 UJ	0.0030 U	4.2	3
Magnesium	—	139000	143000	—	138,000	73,400	143 J	40.7	82.2		5,000
Manganese	—	0.5 U	0.5 U	—	0.5 U	4.8 B	0.38	0.0023 B	0.0025 B		15
Mercury	—	0.1 U	0.1 U	—	0.1 U	0.20 U	0.00020 U	0.00015 B	0.00020 U	0.2	0.2
Nickel	—	0.4 U	0.4 U	—	0.4 U	1.5 B	0.021 B	0.0082 B	0.0016 B	96	40
Potassium	—	4220 B	4400 B	—	4,930 B	2,760 B	5.20	2.09 B	3.88 B		5,000
Selenium	—	5.0 J	3.3 U	—	3.3 U	5.0 U	0.0050 U	0.0050 U	0.0050 U	8.5	5
Silver	—	1.1 B	0.5 U	—	0.5 U	10 U	0.010 U	0.010 U	0.010 U	10	10
Sodium	—	33400	34100	—	33,700	24,300	30.3	23.0	25.4		5,000
Thallium	—	1.5 R	3.0 J	—	1.5 UJ	10 U	0.0048 BJ	0.010 UJ	0.010 U	40	10
Vanadium	—	1.0 U	16.2 B	—	15.7 B	14 J	0.012 B	0.0019 B	0.013 B		50
Zinc	—	4.3 U	4.3 U	—	4.3 U	20 U	0.037	0.020 U	0.020 U	86	20
<b>Inorganics - Metals and Cyanide (Total)</b>											
Aluminum	—	1,200 J	5,400	13,900 J	3,450	250	6.07	0.10 B	9.60 J		
Antimony	—	4.8 U	4.8 U	4.8 U	4.8 U	60 U	0.0062 B	0.0049 B	0.0056 B		
Arsenic	—	3.6 U	3.6 U	3.6 UJ	3.6 UJ	10 U	0.018	0.010 U	0.0048 B		
Barium	—	25.7 J	43.0 B	79.3 B	35.5 B	20 B	0.041 BEJ	0.024 B	0.068 B		
Beryllium	—	2.3 U	2.3 U	2.3 U	2.3 U	5.0 UJ	0.00022 B	0.0050 U	0.0060 B		
Cadmium	—	0.2 U	1.4 B	2.6 B	1.2 B	5.0 U	0.0013 B	0.0050 U	0.0050 U		
Calcium	—	196,000	217,000	263,000	208,000	168,000	240 J	112 J	181		
Chromium	—	9.8 B	13.0	3.5 J	7.2 B	10 U	0.0042 B	0.010 U	0.019		
Cobalt	—	1.7 B	5.0 B	16.2 B	3.3 B	50 U	0.010 B	0.050 U	0.011 B		
Copper	—	10.6 B	18.2 B	32.9	18.1 B	14 B	0.0066 B	0.025 U	0.032		
Cyanide	—	0.2 U	0.2 U	—	—	16.8	0.0020 B	0.0050 U	—	10	10
Iron	—	3,030	8,410 J	38,400 J	9,320	590 J	13.8	0.23	24.0		
Lead	—	1.6 UJ	8.0	22.4 J	9.3 J	3.2	0.0073	0.0021 J	0.014		
Magnesium	—	141,000	146,000	159,000	135,000	72,600	143 J	40.2	86.8		
Manganese	—	103	360 J	1010	293	20	0.38	0.0097 B	0.63		
Mercury	—	0.1 U	0.1 U	0.1 U	0.2	0.20 U	0.00020 U	0.00014 B	0.00017 B		
Nickel	—	1.9 B	8.9 B	35.9 B	9.9 B	40 U	0.021 B	0.0077 B	0.024 B		
Potassium	—	4,750 J	6,360	8,500 E	5,810	2,820 B	5	2.06 B	6.07		
Selenium	—	3.3 R	3.3 U	3.3 U	3.3 U	5.0 U	0.0050 U	0.0050 U	0.0050 U		
Silver	—	1.3 B	0.5 U	0.5 U	0.5 U	10 U	0.010 U	0.010 U	0.010 U		
Sodium	—	34,900	35,200	36,100	32,500	25,100	30.3	22.0	26.1		
Thallium	—	1.5 UJ	1.5 UJ	1.5 UJ	1.5 UJ	10 U	0.0048 BJ	0.010 UJ	0.010 U		
Vanadium	—	1.0 U	25.1 B	1.0 U	14.1 B	13 J	0.012 B	0.0017 B	0.031 B		
Zinc	—	4.3 U	19.7 U	83.3	16.4 B	20 U	0.037	0.020 U	0.060		
<b>Volatile Organic Compounds (VOCs)</b>	—	BRL	BRL	BRL	—	BRL	NS	BRL	NS		
<b>Semi-Volatile Organic Compounds (SVOCs)</b>	—	—	—	—	—	BRL	NS	BRL	NS		
<b>Pesticides / PCBs</b>	—	—	—	—	—	BRL	NS	BRL	NS		

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Results in BOLD indicate a detection above the Contract Required Quantitation Limit (CRQL). An analyte is only bolded if there is a corresponding Trigger Level.
- 4) Results shaded yellow, BOLD, and red with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry or Insufficient Volume)
- 7) U = Indicates compound was analyzed for but not detected.
- 8) B = (Inorganics) Indicates the result is between the Reporting Detection Limit (RDL) and Method Detection Limit (MDL) but below CRQL.
- 9) B = (Organics) Indicates the analyte was detected in the Method Blank.
- 10) UJ = A value less than the CRQL but greater than the MDL.
- 11) J = The analyte was positively identified; the associated numerical value is the estimated concentration of analyte in the sample.
- 12) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 13) CRQL = Contract Required Quantitation Limit
- 14) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 15) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.
- 16) Sampling frequency reduced to semi-annual as per petition report dated 5/15/08 and EPA approval letter dated 11/24/09.
- 17) NS= no sampling required for that event

**Skinner Landfill  
West Chester, Ohio**  
**Groundwater Analysis Summary Table for Creek Surface Water Sample Location SW-50**

Compound	Quarterly Sampling Result (All Results Expressed in Units of $\mu\text{g/L}$ )									TRIGGER LEVEL	CRQL	
	Dec-08	Feb-09	Jun-09	Sep-09	Dec-09	Mar-10	Sep-10	Mar-11	Sep-11			
<b>Inorganics - Metals (Dissolved)<sup>14</sup></b>												
Aluminum	15.3 U	34.1 B	26.9 U	26.9 U	57.1 B	200 J	—	0.20 U	0.024 BJ	—	200	
Antimony	1.6 U	4.8 U	4.8 U	4.8 U	4.8 U	60 U	—	0.060 U	0.060 U	60	60	
Arsenic	10.0 B	3.6 U	3.6 U	3.6 UJ	3.6 UJ	10 U	—	0.010 U	0.010 U	20	10	
Barium	30.9 B	45.1 B	47.9 B	38.5 B	40.5 B	42 B	—	0.036 B	0.033 B	1,000	200	
Beryllium	0.10 U	2.30 U	2.30 U	2.3 U	2.3 U	5.0 U	—	0.0050 U	0.0050 U	5	5	
Cadmium	0.10 U	0.20 U	0.20 U	0.2 U	0.2 U	5.0 U	—	0.0050 U	0.0050 U	5	5	
Calcium	70,500 J	96,600	77,100	66,400 J	96,300	92,700	—	79.1 J	51.8	—	5,000	
Chromium	0.20 U	1.90 B	0.90 B	0.7 B	2.3 B	0.49 B	—	0.010 U	0.010 U	11	10	
Cobalt	0.30 U	0.50 U	0.60 B	0.5 U	0.5 U	50 U	—	0.050 U	0.050 U	—	50	
Copper	0.60 U	5.60 B	6.00 B	3.0 B	5.4 B	5.4 B	—	0.0067 B	0.0076 B	25	25	
Iron	8.1 U	5.3 U	6.9 B	5.3 U	5.3 U	100 U	—	0.10 U	0.10 U	7,000	100	
Lead	1.2 U	1.6 UJ	1.6 U	1.6 U	3.6 J	3.0 U	—	0.0030 U	0.0030 U	4.2	3	
Magnesium	18,600 J	25,700	23,500	17,800 J	28,400	25,100	—	23.1	14.0	—	5,000	
Manganese	0.20 U	0.70 B	2.50 B	0.5 U	0.5 U	2.9 B	—	0.0057 B	0.0012 B	—	15	
Mercury	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.20 U	—	0.00020 U	0.00009 B	0.2	0.2	
Nickel	0.40 U	0.40 U	0.40 U	0.4 U	0.4 U	40 U	—	0.040 U	0.040 U	96	40	
Potassium	2,800 J	2,400 B	3,080 B	3,290 J	2,450 B	2,580 J	—	1.93 B	2.63 B	—	5,000	
Selenium	3.1 UJ	3.3 UJ	3.3 UJ	3.3 R	3.3 U	5.0 UJ	—	0.0050 U	0.0050 U	8.5	5	
Silver	0.40 U	0.60 B	0.50 U	0.50 U	0.5 U	10 U	—	0.010 U	0.010 U	10	10	
Sodium	41,100 J	97,300	64,000	43,900 J	50,700	52,800	—	53.4	36.1	—	5,000	
Thallium	1.8 U	1.5 UJ	5.5 J	1.5 U	1.5 UJ	10 U	—	0.0019 B	0.0100 U	40	10	
Vanadium	0.90 B	1.00 U	5.00 B	1.0 U	6.7 B	7.4 B	—	0.0056 B	0.0077 B	—	50	
Zinc	0.50 UJ	4.30 U	4.30 U	4.3 UJ	4.3 U	20 U	—	0.020 U	0.020 U	86	20	
<b>Inorganics - Metals and Cyanide (Total)</b>												
Aluminum	24.8 B	173 B	38.1 B	26.9 U	76.3 B	230 J	—	0.048 B	0.17 BJ	—	—	
Antimony	1.6 U	4.8 U	4.8 U	4.8 U	4.8 U	60 U	—	0.060 U	0.060 U	—	—	
Arsenic	8.9 B	3.6 U	3.6 U	8.0 B	3.6 U	3.3 B	—	0.010 U	0.010 U	—	—	
Barium	32.1 J	47.2 B	46.5 B	37.9 B	40.5 B	43 B	—	0.044 B	0.36 B	—	—	
Beryllium	0.10 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	—	0.0050 U	0.0050 U	—	—	
Cadmium	0.10 U	0.20 U	0.20 U	0.20 U	0.2 U	5.0 U	—	0.0050 U	0.0050 U	—	—	
Calcium	73,200 J	98,800	77,800	66,100 J	95,200	92,000	—	82.3 J	56.1	—	—	
Chromium	0.20 U	2.1 B	1.0 B	0.6 B	1.6 B	0.52 B	—	0.00057 B	0.010 U	—	—	
Cobalt	0.30 U	0.50 U	0.50 B	0.50 U	0.5 U	50 U	—	0.050 U	0.050 U	—	—	
Copper	0.60 U	6.7 B	6.5 B	3.1 B	5.7 B	6.2 B	—	0.010 B	0.0084 B	—	—	
Cyanide	0.60 U	0.70 B	0.20 U	1.60 U	1.6 U	4.9 B	—	0.0050 U	0.0050 U	10	10	
Iron	19.5 B	253	27.0 B	27.6 B	127	400	—	0.10 U	0.14	—	—	
Lead	3.0 UJ	1.6 UJ	1.6 U	1.6 U	2.3 J	3.0 U	—	0.0030 U	0.0030 U	—	—	
Magnesium	19,000 J	26,100	23,000	17,700 J	27,700	24,900	—	23.6	13.8	—	—	
Manganese	0.20 U	15.5	3.4 B	0.5 U	5.2 B	18	—	0.0094 B	0.020	—	—	
Mercury	0.10 U	0.10 U	0.10 U	0.10 U	0.1 B	0.2 U	—	0.00020 U	0.0008 B	—	—	
Nickel	0.40 U	0.40 U	0.40 U	0.40 U	0.4 U	40 U	—	0.040 U	0.040 U	—	—	
Potassium	2,810 J	2,470 B	3,210 B	3,280 J	2,470 B	2,800 J	—	1.78 B	2.71 B	—	—	
Selenium	3.1 UJ	4.6 J	3.3 UJ	3.3 UJ	3.3 U	5.0 UJ	—	0.0050 U	0.0050 U	—	—	
Silver	0.40 U	0.50 U	0.50 U	0.50 U	0.5 U	10 U	—	0.010 U	0.010 U	—	—	
Sodium	41,000 J	97,400	65,600	44,300 J	49,300	52,300	—	59.9 J	37.6	—	—	
Thallium	9.8 B	1.5 UJ	5.5 J	1.5 U	1.5 UJ	10 U	—	0.010 U	0.010 U	—	—	
Vanadium	0.80 U	1.0 U	5.2 B	1.0 U	4.7 B	8.6 B	—	0.0069 B	0.0096 B	—	—	
Zinc	0.50 UJ	4.3 U	4.3 U	4.3 UJ	4.3 U	20 U	—	0.020 U	0.020 U	—	—	
<b>Volatile Organic Compounds (VOCs)</b>												
<b>Semi-Volatile Organic Compounds (SVOCs)</b>												
<b>Pesticides / PCBs</b>												

Notes:

- 1) All results expressed in micrograms per liter ( $\mu\text{g/L}$ ).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Results in BOLD indicate a detection above the Contract Required Quantitation Limit (CRQL). An analyte is only bolded if there is a corresponding Trigger Level.
- 4) Results shaded yellow, BOLD, and red with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry or Insufficient Volume)
- 7) U = Indicates compound was analyzed for but not detected.
- 8) B = (Inorganics) Indicates the result is between the Reporting Detection Limit (RDL) and Method Detection Limit (MDL) but below CRQL.
- 9) B = (Organics) Indicates the analyte was detected in the Method Blank.
- 10) UJ = A value less than the CRQL but greater than the MDL.
- 11) J = The analyte was positively identified; the associated numerical value is the estimated concentration of analyte in the sample.
- 12) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 13) CRQL = Contract Required Quantitation Limit
- 14) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 15) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.
- 16) Sampling frequency reduced to semi-annual as per petition report dated 5/15/08 and EPA approval letter dated 11/24/09.

**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for Creek Surface Water Sample Location SW-51**

Compound	Quarterly Sampling Result (All Results Expressed in Units of µg/l)									Sampling no longer required - see note 16	Trigger Level	CRQL
	Mar-08	Jun-08	Sep-08	Dec-08	Feb-09	Jun-09	Sep-09	Dec-09	Mar-10			
<b>Inorganics - Metals (Dissolved)<sup>14</sup></b>												
Aluminum	15.4 U	15.3 U	15.3 U	15.3 U	26.9 U	27.6 B	26.9 U	103 B			200	
Antimony	2.4 U	1.6 U	1.6 U	1.6 U	4.8 U	4.8 U	4.8 U	4.8 U		60	60	
Arsenic	2.4 U	2.5 U	2.5 UJ	2.9 B	3.6 U	3.6 U	4.1 UJ	3.6 UJ		20	10	
Barium	41.0 B	47.9 B	43.2 B	32.8 B	47.8 B	47.1 B	37.2 B	40.0 B		1,000	200	
Beryllium	0.10 U	0.10 U	0.10 U	0.10 U	2.30 U	2.30 U	2.3 U	2.3 U		5	5	
Cadmium	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.20 U	0.2 U	0.2 U		5	5	
Calcium	84,500	80,400	81,100	73,700 J	95,000	76,100	64,900 J	93,800			5,000	
Chromium	0.60 B	1.4 B	0.20 U	0.20 U	2.30 B	0.90 B	1.2 B	1.9 B		11	10	
Cobalt	0.20 U	0.30 U	0.30 U	0.30 U	0.50 U	0.80 B	0.5 U	0.5 U			50	
Copper	3.1 B	3.4 B	1.7 B	0.70 B	6.50 B	5.80 B	2.8 B	5.8 B		25	25	
Iron	8.5 U	8.1 U	8.1 U	8.1 U	5.3 U	13.6 B	5.3 U	17.4 B		7,000	100	
Lead	0.80 U	1.2 B	1.5 B	1.2 U	1.6 UJ	1.6 U	1.6 U	2.9 J		4.2	3	
Magnesium	22,100	21,900	25,600 J	18,900 J	25,300	22,500	17,400 J	28,000			5,000	
Manganese	0.3 U	1.7 B	31.4	4.8 B	2.3 B	3.5 B	4.6 B	5.6 B			15	
Mercury	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U		0.2	0.2	
Nickel	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.4 U	0.4 U		96	40	
Potassium	1,740 B	2,760 B	3,540 B	2,840 J	2,380 B	3,040 B	3,120 J	2,380 B			5,000	
Selenium	3.9 U	3.1 UJ	3.1 UJ	3.1 U	3.3 UJ	3.3 UJ	3.3 R	3.3 U		8.5	5	
Silver	0.30 U	0.40 U	1.5 B	0.40 U	0.90 B	0.50 U	0.5	0.5 U		10	10	
Sodium	61,400	37,000	42,800 J	42,800 J	96,700	65,200	43,400 J	49,600			5,000	
Thallium	6.8 B	1.8 U	3.0 BJ	1.8 U	1.5 UJ	3.5 J	1.5 U	1.5 UJ		40	10	
Vanadium	1.5 B	4.8 B	4.8 B	1.6 B	1.0 U	5.0 B	1.0 U	6.8 B			50	
Zinc	8.1 B	12.1 B	0.50 U	0.50 UJ	4.30 U	4.30 U	4.3 UJ	4.3 U		86	20	
<b>Inorganics - Metals and Cyanide (Total)</b>												
Aluminum	117.0 B	44.8 B	15.3 U	24.3 B	58.5 B	46.2 B	26.9 U	52.0 B				
Antimony	2.4 U	1.6 U	1.6 U	1.6 U	4.8 U	4.8 U	4.8 U	4.8 U				
Arsenic	2.4 U	2.5 U	3.7 B	5.1 B	3.6 U	3.6 U	5.9 B	3.6 U				
Barium	40.2 B	42.1 B	50.4 J	33.3 J	46.2 B	49.9 B	36.7 B	42.6 B				
Beryllium	0.10 U	0.10 U	0.10 U	0.10 U	2.30 U	2.30 U	2.30 U	2.3 U				
Cadmium	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.20 U	0.20 U	0.2 U				
Calcium	81,900	72,700	87,200 J	74,400 J	97,000	83,400	65,100 J	98,200				
Chromium	0.6 B	1.3 B	0.20 U	0.20 U	2.10 B	2.80 B	0.40 U	1.9 B				
Cobalt	0.20 U	3.0 U	0.30 U	0.30 U	0.50 U	0.80 B	0.50 U	0.5 U				
Copper	3.2 B	2.4 B	3.0 B	0.60 U	5.80 B	6.10 B	2.90 B	5.4 B				
Cyanide	0.60 U	0.60 U	1.0 B	0.60 U	0.20 U	0.20 U	1.6 U	1.6 U		10	10	
Iron	144	79.7 B	84.3 J	50.6 B	45.1 B	106.0	45.6 B	37.2 B				
Lead	0.80 U	1.7 B	1.7 B	3.0 UJ	1.6 UJ	1.6 U	1.6 U	2.9 J				
Magnesium	21,100	19,700	27,100 J	19,000 J	25,700	24,500	17,400 J	28,800				
Manganese	1.9 B	4.6 B	82.4 J	29.3	3.9 B	11.1 B	7.5 B	3.4 B				
Mercury	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U				
Nickel	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.50 B	0.40 U	0.4 U				
Potassium	1,710 B	2,470 B	3,680 J	2,860 J	2,430 B	3,250 B	3,140 J	2,500 B				
Selenium	3.90 U	3.1 UJ	3.1 U	3.1 UJ	3.3 UJ	3.3 UJ	3.3 UJ	3.3 U				
Silver	0.30 U	0.40 U	0.40 U	0.40 U	0.50 U	0.50 U	0.50 U	0.5 U				
Sodium	59,000 J	33,300	45,000 J	42,200 J	97,400	69,200	43,400 J	51,700				
Thallium	4.4 B	1.8 U	4.1 B	1.9 B	1.5 UJ	2.6 J	1.5 U	1.5 UJ				
Vanadium	1.0 U	4.1 B	11.8 B	1.6 B	1.0 U	4.6 B	1.0 U	5.1 B				
Zinc	9.1 B	9.8 B	0.50 U	0.50 UJ	4.30 U	4.30 U	4.30 UJ	4.30 U				
<b>Volatile Organic Compounds (VOCs)</b>	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL				
<b>Semi-Volatile Organic Compounds (SVOCs)</b>	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL				
<b>Pesticides / PCBs</b>	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL				

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Results in BOLD indicate a detection above the Contract Required Quantitation Limit (CRQL). An analyte is only bolded if there is a corresponding Trigger Level.
- 4) Results shaded yellow, BOLD, and red with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry or Insufficient Volume)
- 7) U = Indicates compound was analyzed for but not detected.
- 8) B = (Inorganics) Indicates the result is between the Reporting Detection Limit (RDL) and Method Detection Limit (MDL) but below CRQL.
- 9) B = (Organics) Indicates the analyte was detected in the Method Blank.
- 10) UJ = A value less than the CRQL but greater than the MDL.
- 11) J = The analyte was positively identified; the associated numerical value is the estimated concentration of analyte in the sample.
- 12) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 13) CRQL = Contract Required Quantitation Limit
- 14) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 15) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.
- 16) Sampling of this well is no longer required based on petition report dated 05/15/08 and EPA approval letter dated 11/24/09.

**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for Creek Surface Water Sample Location SW-52**

Compound	Quarterly Sampling Result (All Results Expressed in Units of µg/l)										TRIGGER LEVEL	CRQL
	Dec-08	Feb-09	Jun-09	Sep-09	Dec-09	Mar-10	Sep-10	Mar-11	Sep-11			
<b>Inorganics - Metals (Dissolved)<sup>14</sup></b>												
Aluminum	15.3 U	26.9 U	26.9 U	26.9 U	65.5 B	31 J	—	0.087 B	0.20 U	—	200	
Antimony	1.6 U	4.8 U	4.8 U	4.8 U	4.8 U	60 U	—	0.060 U	0.060 U	60	60	
Arsenic	3.4 B	3.6 U	3.6 U	9.2 UJ	3.6 U	4.5 B	—	0.0036 B	0.010 U	20	10	
Barium	32.0 B	47.0 B	48.6 B	37.3 B	41.8 B	47 B	—	0.040 B	0.036 B	1,000	200	
Beryllium	0.10 U	2.30 U	2.30 U	2.3 U	2.3 U	5.0 U	—	0.0050 U	0.0050 U	5	5	
Cadmium	0.10 U	0.20 U	0.20 B	0.2 U	0.2 U	5.0 U	—	0.0050 U	0.0050 U	5	5	
Calcium	70,400 J	97,900	78,800	64,900 J	95,200	101,000	—	85.6	53.1	—	5,000	
Chromium	0.20 U	2.10 B	0.70 B	1.0 B	2.2 B	10 U	—	0.010 U	0.010 U	11	10	
Cobalt	0.30 U	0.50 U	0.60 B	0.5 U	0.5 U	50 U	—	0.050 U	0.050 U	—	50	
Copper	0.60 U	5.60 B	5.30 B	2.8 B	6.0 B	8.0 B	—	0.025 U	0.0084 B	25	25	
Iron	8.1 U	5.3 U	11.3 B	14.7 B	22.0 B	100 U	—	0.10 U	0.10 U	7,000	100	
Lead	1.2 U	1.6 UJ	1.6 U	1.6 U	4.3 J	1.6 J	—	0.0030 U	0.0030 U	4.2	3	
Magnesium	18,000 J	26,200	23,200	16,900 J	27,700	27,800	—	24.2	14.5	—	5,000	
Manganese	4.4 B	2.6 B	11.4 B	1.3 B	5.0 B	9.3 B	—	0.0041 B	0.0059 B	—	15	
Mercury	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.2 U	—	0.00017 B	0.00009 B	0.2	0.2	
Nickel	0.40 U	0.40 U	0.90 B	0.4 U	0.4 U	40 U	—	0.0072 B	0.0011 B	96	40	
Potassium	2,750 J	2,440 B	3,060 B	3,130 J	2,400 B	1,880 J	—	1.82 B	2.75 B	—	5,000	
Selenium	3.1 UJ	3.3 UJ	3.3 UJ	3.3 R	3.3 U	5.0 U	—	0.0050 UJ	0.0050 U	8.5	5	
Silver	0.40 U	0.50 B	0.50 U	0.5 U	0.5 U	10 U	—	0.00067 B	0.010 U	10	10	
Sodium	41,200 J	101,000	67,900	43,900 J	50,700	61,500	—	58.5	39.3	—	5,000	
Thallium	1.8 U	1.5 UJ	3.3 J	1.5 U	1.5 UJ	10 U	—	0.010 U	0.010 U	40	10	
Vanadium	2.2 B	1.0 U	4.3 B	1.0 U	7.4 B	12 B	—	0.050 U	0.0081 B	—	50	
Zinc	0.50 UJ	4.30 U	4.30 U	4.3 UJ	4.3 U	20 U	—	0.020 UJ	0.020 U	86	20	
<b>Inorganics - Metals and Cyanide (Total)</b>												
Aluminum	18.6 B	59.1 B	47.5 B	335.0	43.5 B	110 J	—	0.20 U	0.027 BJ	—	—	
Antimony	1.6 U	4.8 U	4.8 U	4.8 U	4.8 U	60 U	—	0.060 U	0.060 U	—	—	
Arsenic	2.8 B	3.6 U	3.6 U	7.3 B	3.6 U	10 U	—	0.0030 B	0.010 U	—	—	
Barium	32.3 J	45.6 B	48.8 B	39.0 B	40.0 B	43 B	—	0.038 B	0.034 B	—	—	
Beryllium	0.10 U	2.30 U	2.30 U	2.3 U	2.3 U	5.0 U	—	0.0050 U	0.0050 U	—	—	
Cadmium	0.10 U	0.20 U	0.20 U	0.2 U	0.2 U	5.0 U	—	0.0050 U	0.0050 U	—	—	
Calcium	71,400 J	95,400	80,000	63,800 J	94,400	93,800	—	81.2	55.2	—	—	
Chromium	0.20 U	2.10 B	1.00 B	0.6 B	1.7 B	10 U	—	0.010 U	0.010 U	—	—	
Cobalt	0.30 U	0.50 U	0.90 B	0.5 U	0.5 U	50 U	—	0.050 U	0.050 U	—	—	
Copper	0.60 U	5.80 B	5.70 B	3.2 B	5.2 B	7.8 B	—	0.025 U	0.0068 B	10	10	
Cyanide	0.60 U	1.30 B	0.20 U	1.6 U	1.6 U	5.0 U	—	0.0050 U	0.0006 B	—	—	
Iron	60.7 B	43.8 B	86.8 B	643	33.2 B	93.0 B	—	0.10 U	0.10 U	—	—	
Lead	3.0 UJ	1.6 UJ	1.6 U	1.6 U	1.6 U	3.0 U	—	0.0030 U	0.0030 U	—	—	
Magnesium	18,100 J	25,700	23,200	16,800 J	26,900	25,900	—	22.7	13.3	—	—	
Manganese	14.1 B	4.2 B	18.8	33.3	5.9 B	7.9 B	—	0.0063 B	0.011 B	—	—	
Mercury	0.10 U	0.10 U	0.10 U	0.1 U	0.2 B	—	—	0.00015 B	0.00020 U	—	—	
Nickel	0.40 U	0.40 U	0.40 U	0.4 U	0.4 U	40 U	—	0.0059 B	0.040 U	—	—	
Potassium	2,750 J	2,400 B	3,110 B	3,050 J	2,430 B	1,780 J	—	1.71 B	2.49 B	—	—	
Selenium	3.1 UJ	3.3 UJ	3.3 UJ	3.3 UJ	3.3 U	5.0 U	—	0.0050 UJ	0.0050 U	—	—	
Silver	0.40 U	1.00 B	0.50 U	0.5 U	0.5 U	10 U	—	0.010 U	0.010 U	—	—	
Sodium	41,100 J	98,800	69,100	42,700 J	49,600	56,600	—	54.5	37.4	—	—	
Thallium	2.9 B	1.5 UJ	7.3 J	1.5 U	1.5 UJ	10 U	—	0.010 U	0.010 U	—	—	
Vanadium	1.6 B	1.0 U	4.6 B	1.0 U	4.7 B	9.2 B	—	0.050 U	0.0099 B	—	—	
Zinc	0.50 UJ	4.30 U	4.30 U	4.3 UJ	4.3 U	20 U	—	0.020 UJ	0.020 U	—	—	
<b>Volatile Organic Compounds (VOCs)</b>												
<b>Semi-Volatile Organic Compounds (SVOCs)</b>												
<b>Pesticides / PCBs</b>												

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Results in BOLD indicate a detection above the Contract Required Quantitation Limit (CRQL). An analyte is only bolded if there is a corresponding Trigger Level.
- 4) Results shaded yellow, BOLD, and red with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ.
- 6) — = No Sample Available (Well Dry or Insufficient Volume)
- 7) U = Indicates compound was analyzed for but not detected.
- 8) B = (Inorganics) Indicates the result is between the Reporting Detection Limit (RDL) and Method Detection Limit (MDL) but below CRQL.
- 9) B = (Organics) Indicates the analyte was detected in the Method Blank.
- 10) UJ = A value less than the CRQL but greater than the MDL.
- 11) J = The analyte was positively identified; the associated numerical value is the estimated concentration of analyte in the sample.
- 12) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 13) CRQL = Contract Required Quantitation Limit
- 14) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 15) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.
- 16) Sampling frequency reduced to semi-annual as per petition report dated 5/15/08 and EPA approval letter dated 11/24/09.

**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for Outfall Surface Water Run Off Location SWD-1**

Compound	Quarterly Sampling Results (All Results Expressed in Units of mg/l)										TRIGGER LEVEL	CRQL
	Dec-08	Feb-09	Apr-09	Sep-09	Dec-09	Mar-10	Sep-10	Mar-11	Sep-11			
<b>Inorganics - Metals (Dissolved)<sup>14</sup></b>	Location Dry	Location Dry		Location Dry								
Aluminum	—	—	34.6 B	—	—	—	—	—	—		200	
Antimony	—	—	4.8 U	—	—	—	—	—	—	60	60	
Arsenic	—	—	3.6 U	—	—	—	—	—	—	20	10	
Barium	—	—	47.4 J	—	—	—	—	—	—	1,000	200	
Beryllium	—	—	2.3 U	—	—	—	—	—	—	5	5	
Cadmium	—	—	0.2 U	—	—	—	—	—	—	5	5	
Calcium	—	—	95200	—	—	—	—	—	—		5,000	
Chromium	—	—	1.6 B	—	—	—	—	—	—	11	10	
Cobalt	—	—	0.5 U	—	—	—	—	—	—		50	
Copper	—	—	5.0 B	—	—	—	—	—	—	25	25	
Iron	—	—	5.3 U	—	—	—	—	—	—	7,000	100	
Lead	—	—	1.6 UJ	—	—	—	—	—	—	4.2	3	
Magnesium	—	—	15700	—	—	—	—	—	—		5,000	
Manganese	—	—	0.5 U	—	—	—	—	—	—		15	
Mercury	—	—	0.1 U	—	—	—	—	—	—	0.2	0.2	
Nickel	—	—	0.4 U	—	—	—	—	—	—	96	40	
Potassium	—	—	4990 B	—	—	—	—	—	—		5,000	
Selenium	—	—	3.3 U	—	—	—	—	—	—	8.5	5	
Silver	—	—	0.5 U	—	—	—	—	—	—	10	10	
Sodium	—	—	4270 B	—	—	—	—	—	—		5,000	
Thallium	—	—	1.5 UJ	—	—	—	—	—	—	40	10	
Vanadium	—	—	1.0 U	—	—	—	—	—	—		50	
Zinc	—	—	135	—	—	—	—	—	—	86	20	
<b>Inorganics - Metals and Cyanide (Total)</b>												
Aluminum	—	—	180 B	—	—	—	—	—	—			
Antimony	—	—	4.8 U	—	—	—	—	—	—			
Arsenic	—	—	3.6 U	—	—	—	—	—	—			
Barium	—	—	49.2 J	—	—	—	—	—	—			
Beryllium	—	—	2.3 U	—	—	—	—	—	—			
Cadmium	—	—	0.2 U	—	—	—	—	—	—			
Calcium	—	—	94200	—	—	—	—	—	—			
Chromium	—	—	1.4 B	—	—	—	—	—	—			
Cobalt	—	—	0.5 U	—	—	—	—	—	—			
Copper	—	—	5.4 B	—	—	—	—	—	—			
Cyanide	—	—	0.2 U	—	—	—	—	—	—	10	10	
Iron	—	—	322	—	—	—	—	—	—			
Lead	—	—	1.6 U	—	—	—	—	—	—			
Magnesium	—	—	152000	—	—	—	—	—	—			
Manganese	—	—	6.0 B	—	—	—	—	—	—			
Mercury	—	—	0.1 U	—	—	—	—	—	—			
Nickel	—	—	0.4 U	—	—	—	—	—	—			
Potassium	—	—	5130	—	—	—	—	—	—			
Selenium	—	—	3.3 U	—	—	—	—	—	—			
Silver	—	—	0.5 U	—	—	—	—	—	—			
Sodium	—	—	4290 B	—	—	—	—	—	—			
Thallium	—	—	1.5 UJ	—	—	—	—	—	—			
Vanadium	—	—	1.0 U	—	—	—	—	—	—			
Zinc	—	—	142	—	—	—	—	—	—			
<b>Volatile Organic Compounds (VOCs)</b>	—	—	BRL	—	—	—	—	—	—			
<b>Semi-Volatile Organic Compounds (SVOCs)</b>	—	—	BRL	—	—	—	—	—	—			
<b>Pesticides / PCBs</b>	—	—	BRL	—	—	—	—	—	—			

Notes:

- 1) All results expressed in micrograms per liter ( $\mu\text{g/L}$ ).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Results in BOLD indicate a detection above the Contract Required Quantitation Limit (CRQL). An analyte is only bolded if there is a corresponding Trigger Level.
- 4) Results shaded yellow, BOLD, and red with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry or Insufficient Volume)
- 7) U = Indicates compound was analyzed for but not detected.
- 8) B = (Inorganics) Indicates the result is between the Reporting Detection Limit (RDL) and Method Detection Limit (MDL) but below CRQL.
- 9) B = (Organics) Indicates the analyte was detected in the Method Blank.
- 10) UJ = A value less than the CRQL but greater than the MDL.
- 11) J = The analyte was positively identified; the associated numerical value is the estimated concentration of analyte in the sample.
- 12) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 13) CRQL = Contract Required Quantitation Limit
- 14) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 15) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.
- 16) Sampling frequency reduced to semi-annual as per petition report dated 5/15/08 and EPA approval letter dated 11/24/09.

**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for Outfall Surface Water Run Off Location SWD-2**

Compound	Quarterly Sampling Results (All Results Expressed in Units of mg/l)									Trigger Level	CRQL
	Mar-08	Jun-08	Sep-08	Dec-08	Feb-09	Apr-09	Sep-09	Dec-09	Mar-10		
<b>Inorganics - Metals (Dissolved)<sup>14</sup></b>			Location Dry	Sampling no longer required - see note 16							
Aluminum	15.4 U	15.3 U	—	—	—	—	—	—	—		200
Antimony	2.4 U	1.6 U	—	—	—	—	—	—	—	60	60
Arsenic	2.4 U	2.5 U	—	—	—	—	—	—	—	20	10
Barium	20.8 B	45.3 B	—	—	—	—	—	—	—	1,000	200
Beryllium	0.10 U	0.10 U	—	—	—	—	—	—	—	5	5
Cadmium	0.10 U	0.10 U	—	—	—	—	—	—	—	5	5
Calcium	109,000	117,000	—	—	—	—	—	—	—		5,000
Chromium	0.50 B	2.0 B	—	—	—	—	—	—	—	11	10
Cobalt	0.20 U	0.30 U	—	—	—	—	—	—	—		50
Copper	3.0 B	3.0 B	—	—	—	—	—	—	—	25	25
Iron	8.5 U	8.1 U	—	—	—	—	—	—	—	7,000	100
Lead	0.8 U	1.2 U	—	—	—	—	—	—	—	4.2	3
Magnesium	31,200	33,600	—	—	—	—	—	—	—		5,000
Manganese	0.30 U	0.20 U	—	—	—	—	—	—	—		15
Mercury	0.10 U	0.10 U	—	—	—	—	—	—	—	0.2	0.2
Nickel	0.40 U	0.40 U	—	—	—	—	—	—	—	96	40
Potassium	1,870 B	2,730 B	—	—	—	—	—	—	—		5,000
Selenium	3.9 U	3.1 U	—	—	—	—	—	—	—	8.5	5
Silver	0.30 U	0.40 U	—	—	—	—	—	—	—	10	10
Sodium	2,350 B	2,470 B	—	—	—	—	—	—	—		5,000
Thallium	5.0 B	1.8 B	—	—	—	—	—	—	—	40	10
Vanadium	1.0 U	9.8 B	—	—	—	—	—	—	—		50
Zinc	9.9 B	10.0 B	—	—	—	—	—	—	—	86	20
<b>Inorganics - Metals and Cyanide (Total)</b>											
Aluminum	15.4 U	15.3 U	—	—	—	—	—	—	—		
Antimony	2.4 U	1.6 U	—	—	—	—	—	—	—		
Arsenic	2.4 U	2.5 U	—	—	—	—	—	—	—		
Barium	19.5 B	44.9 B	—	—	—	—	—	—	—		
Beryllium	0.10 U	0.10 U	—	—	—	—	—	—	—		
Cadmium	0.10 U	0.10 U	—	—	—	—	—	—	—		
Calcium	108,000	118,000	—	—	—	—	—	—	—		
Chromium	0.5 B	1.8 B	—	—	—	—	—	—	—		
Cobalt	0.20 U	0.30 U	—	—	—	—	—	—	—		
Copper	2.8 B	2.7 B	—	—	—	—	—	—	—		
Cyanide	0.60 U	0.70 B	—	—	—	—	—	—	—		
Iron	8.50 U	8.1 U	—	—	—	—	—	—	—		
Lead	0.80 U	1.2 U	—	—	—	—	—	—	—		
Magnesium	30,100	32,600	—	—	—	—	—	—	—		
Manganese	0.30 U	0.20 U	—	—	—	—	—	—	—		
Mercury	0.10 U	0.10 U	—	—	—	—	—	—	—		
Nickel	0.40 U	0.40 U	—	—	—	—	—	—	—		
Potassium	1,810 B	2,650 B	—	—	—	—	—	—	—		
Selenium	3.90 U	3.1 U	—	—	—	—	—	—	—		
Silver	0.30 U	0.40 U	—	—	—	—	—	—	—		
Sodium	1,930 B	2,300 B	—	—	—	—	—	—	—		
Thallium	4.6 B	1.8 U	—	—	—	—	—	—	—		
Vanadium	1.0 U	8.8 B	—	—	—	—	—	—	—		
Zinc	12.4 B	9.0 B	—	—	—	—	—	—	—		
<b>Volatile Organic Compounds (VOCs)</b>	BRL	BRL	—	—	—	—	—	—	—		
<b>Semi-Volatile Organic Compounds (SVOCs)</b>	BRL	BRL	—	—	—	—	—	—	—		
<b>Pesticides / PCBs</b>	BRL	BRL	—	—	—	—	—	—	—		

Notes:

- 1) All results expressed in micrograms per liter ( $\mu\text{g/L}$ ).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Results in BOLD indicate a detection above the Contract Required Quantitation Limit (CRQL). An analyte is only bolded if there is a corresponding Trigger Level.
- 4) Results shaded yellow, BOLD, and red with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry or Insufficient Volume)
- 7) U = Indicates compound was analyzed for but not detected.
- 8) B = (Inorganics) Indicates the result is between the Reporting Detection Limit (RDL) and Method Detection Limit (MDL) but below CRQL.
- 9) B = (Organics) Indicates the analyte was detected in the Method Blank.
- 10) UJ = A value less than the CRQL but greater than the MDL.
- 11) J = The analyte was positively identified; the associated numerical value is the estimated concentration of analyte in the sample.
- 12) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 13) CRQL = Contract Required Quantitation Limit
- 14) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 15) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.
- 16) Sampling of this well is no longer required based on petition report dated 05/15/08 and EPA approval letter dated 11/24/09.

**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for Outfall Surface Water Run Off Location SWD-3**

Compound	Quarterly Sampling Results (All Results Expressed in Units of mg/l)										TRIGGER LEVEL	CRQL
	Sep-08	Dec-08	Feb-09	Apr-09	Sep-09	Dec-09	Mar-10	Sep-11	Mar-11	Sep-11		
<b>Inorganics - Metals (Dissolved)<sup>14</sup></b>	Location Dry	Location Dry	Location Dry		Location Dry							
Aluminum	—	—	—	27 U	—	—	—	—	—	—	60	200
Antimony	—	—	—	4.8 U	—	—	—	—	—	—	20	60
Arsenic	—	—	—	3.6 U	—	—	—	—	—	—	1,000	10
Barium	—	—	—	9.5 J	—	—	—	—	—	—	1,000	200
Beryllium	—	—	—	2.3 U	—	—	—	—	—	—	5	5
Cadmium	—	—	—	0.2 U	—	—	—	—	—	—	5	5
Calcium	—	—	—	35800	—	—	—	—	—	—	—	5,000
Chromium	—	—	—	0.4 U	—	—	—	—	—	—	11	10
Cobalt	—	—	—	0.5 U	—	—	—	—	—	—	—	50
Copper	—	—	—	2.5 B	—	—	—	—	—	—	25	25
Iron	—	—	—	15.9 B	—	—	—	—	—	—	7,000	100
Lead	—	—	—	1.6 UJ	—	—	—	—	—	—	4.2	3
Magnesium	—	—	—	3970 B	—	—	—	—	—	—	—	5,000
Manganese	—	—	—	0.5 U	—	—	—	—	—	—	—	15
Mercury	—	—	—	0.1 U	—	—	—	—	—	—	0.2	0.2
Nickel	—	—	—	0.6 B	—	—	—	—	—	—	96	40
Potassium	—	—	—	3080 B	—	—	—	—	—	—	—	5,000
Selenium	—	—	—	3.3 U	—	—	—	—	—	—	8.5	5
Silver	—	—	—	0.5 U	—	—	—	—	—	—	10	10
Sodium	—	—	—	949 B	—	—	—	—	—	—	—	5,000
Thallium	—	—	—	1.5 UJ	—	—	—	—	—	—	40	10
Vanadium	—	—	—	1.0 U	—	—	—	—	—	—	—	50
Zinc	—	—	—	4.3 U	—	—	—	—	—	—	86	20
<b>Inorganics - Metals and Cyanide (Total)</b>												
Aluminum	—	—	—	162 B	—	—	—	—	—	—	—	—
Antimony	—	—	—	4.8 U	—	—	—	—	—	—	—	—
Arsenic	—	—	—	3.6 U	—	—	—	—	—	—	—	—
Barium	—	—	—	10.8 J	—	—	—	—	—	—	—	—
Beryllium	—	—	—	2.3 U	—	—	—	—	—	—	—	—
Cadmium	—	—	—	0.2 U	—	—	—	—	—	—	—	—
Calcium	—	—	—	37500	—	—	—	—	—	—	—	—
Chromium	—	—	—	0.4 B	—	—	—	—	—	—	—	—
Cobalt	—	—	—	0.5 U	—	—	—	—	—	—	—	—
Copper	—	—	—	6.6 B	—	—	—	—	—	—	—	—
Cyanide	—	—	—	0.2 U	—	—	—	—	—	—	10	10
Iron	—	—	—	304	—	—	—	—	—	—	—	—
Lead	—	—	—	1.6 UJ	—	—	—	—	—	—	—	—
Magnesium	—	—	—	4210 B	—	—	—	—	—	—	—	—
Manganese	—	—	—	6.7 B	—	—	—	—	—	—	—	—
Mercury	—	—	—	0.1 U	—	—	—	—	—	—	—	—
Nickel	—	—	—	0.4 U	—	—	—	—	—	—	—	—
Potassium	—	—	—	3310 B	—	—	—	—	—	—	—	—
Selenium	—	—	—	3.3 U	—	—	—	—	—	—	—	—
Silver	—	—	—	0.5 U	—	—	—	—	—	—	—	—
Sodium	—	—	—	739 B	—	—	—	—	—	—	—	—
Thallium	—	—	—	1.5 UJ	—	—	—	—	—	—	—	—
Vanadium	—	—	—	1.0 U	—	—	—	—	—	—	—	—
Zinc	—	—	—	4.3 U	—	—	—	—	—	—	—	—
<b>Volatile Organic Compounds (VOCs)</b>	—	—	—	BRL	—	—	—	—	—	—	—	—
<b>Semi-Volatile Organic Compounds (SVOCs)</b>	—	—	—		—	—	—	—	—	—	—	—
<b>Pesticides / PCBs</b>	—	—	—	BRL	—	—	—	—	—	—	—	—

Notes:

- 1) All results expressed in micrograms per liter ( $\mu\text{g/L}$ ).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Results in BOLD indicate a detection above the Contract Required Quantitation Limit (CRQL). An analyte is only bolded if there is a corresponding Trigger Level.
- 4) Results shaded yellow, BOLD, and red with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry or Insufficient Volume)
- 7) U = Indicates compound was analyzed for but not detected.
- 8) B = (Inorganics) Indicates the result is between the Reporting Detection Limit (RDL) and Method Detection Limit (MDL) but below CRQL.
- 9) B = (Organics) Indicates the analyte was detected in the Method Blank.
- 10) UJ = A value less than the CRQL but greater than the MDL.
- 11) J = The analyte was positively identified; the associated numerical value is the estimated concentration of analyte in the sample.
- 12) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 13) CRQL = Contract Required Quantitation Limit
- 14) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 15) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.
- 16) Sampling frequency reduced to semi-annual as per petition report dated 5/15/08 and EPA approval letter dated 11/24/09.

**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for GW-24**

Compound	Quarterly Sampling Results (All Results Expressed in Units of $\mu\text{g/l}$ )										<b>TRIGGER LEVEL</b>	<b>CRQL</b>
	Mar-08	Jun-08	Sep-08	Dec-08	Feb-09	Jun-09	Sep-09	Dec-09	Mar-10			
<b>Inorganics - Metals (Dissolved)<sup>14</sup></b>	Annual	Not Sampled	Not Sampled	Not Sampled	Annual	Not Sampled	Not Sampled	Not Sampled	Sampling no longer required - see note 16			
Aluminum	15.6 B				35.3 B					200		
Antimony	2.4 U				4.8 U					60	60	
Arsenic	3.7 B				5.0 J					20	10	
Barium	86.7 B				101 B					1,000	200	
Beryllium	0.10 U				2.3 U					5	5	
Cadmium	0.10 U				0.2 U					5	5	
Calcium	119,000				122000						5,000	
Chromium	0.30 U				2.1 B					11	10	
Cobalt	0.20 U				0.5 U						50	
Copper	1.6 B				4.9 B					25	25	
Iron	514.0				984					7,000	100	
Lead	1.80 B				1.6 UJ					4.2	3	
Magnesium	25,900				30000						5,000	
Manganese	96.1				232						15	
Mercury	0.10 U				0.1 U					0.2	0.2	
Nickel	0.40 U				0.4 U					96	40	
Potassium	2,520 B				3640 B						5,000	
Selenium	3.9 U				3.3 U					8.5	5	
Silver	0.30 U				0.5 U					10	10	
Sodium	15,700 B				101000						5,000	
Thallium	6.7 B				1.5 R					40	10	
Vanadium	1.0 U				1.0 U						50	
Zinc	12.5 B				4.3 U					86	20	
<b>Inorganics - Metals and Cyanide (Total)</b>												
Aluminum	4,870 J				363 J							
Antimony	2.4 U				4.8 U							
Arsenic	2.4 UJ				4.3 J							
Barium	109 B				105 J							
Beryllium	0.20 B				2.3 U							
Cadmium	0.10 U				0.2 U							
Calcium	171,000				135000							
Chromium	8.2 B				3.2 B							
Cobalt	5.0 B				0.5 U							
Copper	9.9 B				5.6 B							
Cyanide	1.30 B				0.7 B					10	10	
Iron	11,600				1900							
Lead	4.3 J				1.6 UJ							
Magnesium	35,000				33000							
Manganese	420				261							
Mercury	0.10 U				0.1 U							
Nickel	9.4 B				0.4 U							
Potassium	4,020 J				3780 J							
Selenium	3.9 U				3.3 R							
Silver	0.30 U				0.6 B							
Sodium	15,100				93800							
Thallium	1.9 B				1.5 UJ							
Vanadium	6.9 B				1.0 U							
Zinc	44.9 J				4.3 U							
<b>Volatile Organic Compounds (VOCs)</b>	BRL				BRL							
<b>Semi-Volatile Organic Compounds (SVOCs)</b>	BRL				BRL							
<b>Pesticides / PCBs</b>	BRL				BRL							

Notes:

- 1) All results expressed in micrograms per liter ( $\mu\text{g/L}$ ).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Results in BOLD indicate a detection above the Contract Required Quantitation Limit (CRQL). An analyte is only bolded if there is a corresponding Trigger Level.
- 4) Results shaded yellow, BOLD, and red with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry or Insufficient Volume)
- 7) U = Indicates compound was analyzed for but not detected.
- 8) B = (Inorganics) Indicates the result is between the Reporting Detection Limit (RDL) and Method Detection Limit (MDL) but below CRQL.
- 9) B = (Organics) Indicates the analyte was detected in the Method Blank.
- 10) UJ = A value less than the CRQL but greater than the MDL.
- 11) J = The analyte was positively identified; the associated numerical value is the estimated concentration of analyte in the sample.
- 12) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 13) CRQL = Contract Required Quantitation Limit
- 14) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 15) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.
- 16) Sampling of this well is no longer required based on petition report dated 05/15/08 and EPA approval letter dated 11/24/09.

**Skinner Landfill  
West Chester, Ohio**  
**Groundwater Analysis Summary Table for GW-26**

Compound	Quarterly Sampling Results (All Results Expressed in Units of µg/l)									<b>TRIGGER LEVEL</b>	CRQL
	Sep-08	Feb-09	Jun-09	Sep-09	Dec-09	Mar-10	Sep-10	Mar-11	Sep-11		
<b>Inorganics - Metals (Dissolved)<sup>14</sup></b>	Not Sampled	Annual	Not Sampled	Not Sampled	Not Sampled	Semi-annual	Semi-annual	Semi-annual	Semi-annual		
Aluminum		26.9 U				470	0.20	0.15 B	0.20 U		200
Antimony		4.8 U				60 U	0.060	0.060 U	0.060 U	60	60
Arsenic		3.6 U				10 U	0.0038	0.010 U	0.010 U		10
Barium		780				300	0.60 J	0.83	0.47	1,000	200
Beryllium		2.3 U				5.0 UJ	0.0050	0.0050 U	0.0050 U	5	5
Cadmium		0.2 U				5.0 U	0.00048	0.0050 U	0.0048 B	5	5
Calcium		67900				72000	61.6 J	68.0 J	56.9		5,000
Chromium		2.6 B				10 U	0.010	0.00043 B	0.010 U	11	10
Cobalt		0.5 U				0.92 B	0.0017	0.050 U	0.050 U		50
Copper		5.5 B				8.6 B	0.025	0.0072 B	0.0091 B	25	25
Iron		68.4 B				100 U	0.18	0.068 B	0.14	7,000	100
Lead		1.6 UJ				3.0 J	0.0030	0.0030 U	0.0030 U	4.2	3
Magnesium		36,100				38,100	32.3 J	36.30	37.4		5,000
Manganese		77.7				52	0.092	0.080	0.075		15
Mercury		0.1 U				0.20 U	0.00020	0.00020 U	0.00020 U	0.2	0.2
Nickel		0.4 U				40 U	0.0036	0.040 U	0.040 U	96	40
Potassium		20,100				16,300	17.6	19.8	19.2		5,000
Selenium		3.3 UJ				5.0 U	0.0050	0.0050 U	0.0050 U	8.5	5
Silver		0.5 U				10 U	0.010	0.010 U	0.010 U	10	10
Sodium		195,000				144,000	189	185	184		5,000
Thallium		1.5 R				10 U	0.0045 J	0.010 U	0.010 U	40	10
Vanadium		1 U				13 J	0.0057	0.0071 B	0.013 B		50
Zinc		4.3 U				20 U	0.020	0.020 U	0.020 U	86	20
<b>Inorganics - Metals and Cyanide (Total)</b>											
Aluminum		92.4 J				390	0.52	0.064 B	0.043 BJ		
Antimony		4.8 U				60 U	0.060	0.060 U	0.060 U		
Arsenic		3.6 U				10 U	0.011	0.010 U	0.010 U		
Barium		859 J				300	0.62 EJ	0.79	0.45		
Beryllium		2.3 U				5.0 UJ	0.0050	0.0050 U	0.0050 U		
Cadmium		0.2 U				5.0 U	0.00045	0.0050 U	0.0050 U		
Calcium		73,600				77,800	67.2 J	64.4 J	66.3		
Chromium		2.8 B				10 U	0.010	0.00064 B	0.010 U		
Cobalt		0.5 U				50 U	0.0032	0.050 U	0.050 U		
Copper		6.0 B				17 B	0.025	0.0079 B	0.0095 B		
Cyanide		0.2 U				7.4	0.0 U	0.0050 U	0.0008 B	10	10
Iron		465				270.0	2.22	0.24	0.41		
Lead		1.6 U				4.1 J	0.0030	0.0030 U	0.0030 U		
Magnesium		39200				40600	32.8 J	34.0	35.9		
Manganese		88.5				55.0	0.13	0.061	0.071		
Mercury		0.1 U				0.20 U	0.00020	0.00020 U	0.00020 U		
Nickel		0.4 U				1.7 B	0.0059	0.040 U	0.040 U		
Potassium		21,900 J				17,400	17.7	19.0	18.5		
Selenium		3.3 R				5.0 U	0.0050	0.0050 U	0.0050 U		
Silver		0.5 U				10 U	0.010	0.010 U	0.010 U		
Sodium		213,000				154,000	187	184	179		
Thallium		1.5 UJ				10 U	0.0021 J	0.010 U	0.010 U		
Vanadium		1.0 U				12 J	0.0069	0.0064 B	0.012 B		
Zinc		4.3 U				20 U	0.020	0.020 U	0.020 U		
<b>Volatile Organic Compounds (VOCs)</b>		BRL				BRL	Not sampled	BRL	Not sampled		
<b>Semi-Volatile Organic Compounds (SVOCs)</b>		BRL				BRL	Not Sampled	BRL	Not sampled		
<b>Pesticides / PCBs</b>		BRL				BRL	Not Sampled	BRL	Not sampled		

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Results in **BOLD** indicate a detection above the Contract Required Quantitation Limit (CRQL). An analyte is only bolded if there is a corresponding Trigger Level.
- 4) Results shaded yellow, **BOLD**, and red with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry or Insufficient Volume)
- 7) U = Indicates compound was analyzed for but not detected.
- 8) B = (Inorganics) Indicates the result is between the Reporting Detection Limit (RDL) and Method Detection Limit (MDL) but below CRQL.
- 9) B = (Organics) Indicates the analyte was detected in the Method Blank.
- 10) UJ = A value less than the CRQL but greater than the MDL.
- 11) J = The analyte was positively identified; the associated numerical value is the estimated concentration of analyte in the sample.
- 12) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 13) CRQL = Contract Required Quantitation Limit
- 14) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 15) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.
- 16) Sampling frequency reduced to semi-annual as per petition report dated 5/15/08 and EPA approval letter dated 11/24/09.

**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for GW-30**

Compound	Quarterly Sampling Results (All Results Expressed in Units of mg/l)									Mar-10	Trigger Level	CRQL
	Mar-08	Jun-08	Sep-08	Dec-08	Feb-09	Jun-09	Sep-09	Dec-09				
<b>Inorganics - Metals (Dissolved)<sup>14</sup></b>	Annual	Not Sampled	Not Sampled	Not Sampled	Annual	Not Sampled	Not Sampled	Not Sampled	Sampling no longer required - see note 16			
Aluminum	15.4 U				26.9 U					200		
Antimony	2.4 U				4.8 U					60	60	
Arsenic	2.6 B				3.6 U					20	10	
Barium	188.0 B				439					1,000	200	
Beryllium	0.10 U				2.3 U					5	5	
Cadmium	0.10 U				0.2 U					5	5	
Calcium	58,000				68900						5,000	
Chromium	0.30 B				2.5 B					11	10	
Cobalt	0.20 U				0.5 U						50	
Copper	2.2 B				4.9 B					25	25	
Iron	127.0				342					7,000	100	
Lead	0.80 U				1.6 UJ					4.2	3	
Magnesium	28,300				31400						5,000	
Manganese	17.3				30.8						15	
Mercury	0.10 U				0.1 U					0.2	0.2	
Nickel	0.70 B				0.4 U					96	40	
Potassium	12,200				12800						5,000	
Selenium	3.9 U				3.3 UJ					8.5	5	
Silver	0.30 U				0.5 B					10	10	
Sodium	138,000				144000						5,000	
Thallium	4.5 B				1.5 R					40	10	
Vanadium	1.0 U				1.0 U						50	
Zinc	7.7 B				4.3 U					86	20	
<b>Inorganics - Metals and Cyanide (Total)</b>												
Aluminum	15.4 UJ				57.7 J							
Antimony	2.4 U				4.8 U							
Arsenic	2.4 UJ				5.1 J							
Barium	201.0				495.0 J							
Beryllium	0.10 U				2.30 U							
Cadmium	0.10 U				0.20 U							
Calcium	61,100				74,000							
Chromium	0.50 B				2.00 B							
Cobalt	0.20 U				0.50 U							
Copper	4.3 B				5.4 B							
Cyanide	0.60 U				0.20 U					10	10	
Iron	303				622							
Lead	0.80 UJ				1.60 UJ							
Magnesium	29,600				34,200							
Manganese	22.4				36.8							
Mercury	0.10 U				0.10 U							
Nickel	0.40 U				0.40 U							
Potassium	13,400 J				13,700 J							
Selenium	3.9 U				3.3 R							
Silver	0.30 U				0.70 B							
Sodium	145,000				153,000							
Thallium	3.9 B				1.5 UJ							
Vanadium	1.2 B				1.0 U							
Zinc	10.3 J				4.3 U							
<b>Volatile Organic Compounds (VOCs)</b>	BRL				BRL							
<b>Semi-Volatile Organic Compounds (SVOCs)</b>	BRL				BRL							
<b>Pesticides / PCBs</b>	BRL				BRL							

Notes:

- 1) All results expressed in micrograms per liter ( $\mu\text{g/L}$ ).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Results in BOLD indicate a detection above the Contract Required Quantitation Limit (CRQL). An analyte is only bolded if there is a corresponding Trigger Level.
- 4) Results shaded yellow, BOLD, and red with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry or Insufficient Volume)
- 7) U = Indicated compound was analyzed for but not detected.
- 8) B = (Inorganics) Indicates the result is between the Reporting Detection Limit (RDL) and Method Detection Limit (MDL) but below CRQL.
- 9) B = (Organics) Indicates the analyte was detected in the Method Blank.
- 10) UJ = A value less than the CRQL but greater than the MDL.
- 11) J = The analyte was positively identified; the associated numerical value is the estimated concentration of analyte in the sample.
- 12) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 13) CRQL = Contract Required Quantitation Limit
- 14) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 15) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.
- 16) Sampling of this well is no longer required based on petition report dated 05/15/08 and EPA approval letter dated 11/24/09.

## **APPENDIX C**

### **Summary of BCWS Discharge Sample Data, 2002 - 2010**

Butler County Water & Sewer Department  
 Industrial Pretreatment Program  
 Compliance Results Report - by Parameter

Report Period: 01/01/1970 to 12/27/2020

Permit: **PTX-0029-04**  
 Permittee: **Skinner Landfill**  
 Location: Cincinnati-Dayton Road , West Chester, OH 45069

### Ammonia

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS				
						Result Flags	Reporting Limit	Adjusted Result	Daily Limit	Monthly Limit	Result (lbs/day)	Violations	Daily Limit
020000393B	1	Comp	01-24-2002	mg/L	8.57			8.57					
030000409B	1	Comp	01-29-2003	mg/L	3.67			3.67					
030000688B	1	Comp	02-20-2003	mg/L	2.27			2.27					
030001093B	1	Comp	03-19-2003	mg/L	4.18			4.18	100				
030001703B	1	Comp	04-25-2003	mg/L	5.42			5.42	100				
030002183B	1	Comp	05-28-2003	mg/L	4.5			4.5	100				
030002477B	1	Comp	06-12-2003	mg/L	7.55			7.55	100				
30003114	1	Comp	09-24-2003	mg/L	9.25			9.25	100				
030003498A	1	Comp	10-28-2003	mg/L	8.22			8.22	100				
040003044A	1	Comp	01-21-2004	mg/L	5.35			5.35	100				
MAY 2004	1	Comp	05-04-2004	mg/L	3.32			3.32	100				
3RD QUARTER	1	Comp	08-04-2004	mg/L	3.98			3.98	100				
OCTOBER 2004	1	Comp	10-14-2004	mg/L	8.52			8.52	100				
May 05 Week 3	1	Comp	05-10-2005	mg/L	<0.05			0.025	100				
September 05 Week 2	1	Comp	08-16-2005	mg/L	15.7			15.7	100				
November 05 Week 3	1	Comp	10-28-2005	mg/L	7.9			7.9	100				
April 06 Week 2	1	Comp	03-28-2006	mg/L	2.18			2.18	100				
June 06 Week 1	1	Comp	05-16-2006	mg/L	3.38			3.38	100				
September 06 Week 1	1	Comp	08-11-2006	mg/L	6.15			6.15	100				
November 06 Week 3	1	Comp	10-17-2006	mg/L	3.52			3.52	100				
April 07 Week 1	1	Comp	03-09-2007	mg/L	1.69			1.69	100				
August 07 Week 5	1	Comp	08-16-2007	mg/L	15.6			15.6	100				
November 07 Week 3	1	Comp	10-26-2007	mg/L	4.42			4.42	100				
MARCH 08 WEEK 3	1	Comp	03-21-2008	mg/L	0.79			0.79	100				
JUNE 08 WEEK 4	1	Comp	06-26-2008	mg/L	7.61			7.61	100				
OCTOBER 08 WEEK 2	1	Comp	10-09-2008	mg/L	9.66			9.66	100				
MARCH 09 WEEK 2	1	Comp	03-10-2009	mg/L	1.72			1.72	100				

Permit: PTX-0029-04  
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### Ammonia

Sample ID	MonPoint	Collection Method	Collection Date	CONCENTRATION					MASS				
				Units	Result	Result Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations
Total Concentration Results: 27 Avg: 5.7461111 Min: .0250000 Max: 15.7000000													
Total Mass Results: 0		Avg:		Min:	Max:								

### Arsenic

Sample ID	MonPoint	Collection Method	Collection Date	CONCENTRATION					MASS				
				Units	Result	Result Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations
020000393C	1	Comp	01-24-2002	mg/L	0.0014			0.0014					
030000409C	1	Comp	01-29-2003	mg/L	<0.005			0.0025					
030000688C	1	Comp	02-20-2003	mg/L	<0.005			0.0025					
030001093C	1	Comp	03-19-2003	mg/L	<0.005			0.0025					
030001703C	1	Comp	04-25-2003	mg/L	<0.005			0.0025					
030002183C	1	Comp	05-28-2003	mg/L	<0.005			0.0025					
030002477C	1	Comp	06-12-2003	mg/L	<0.005			0.0025					
04050223-001	1	Comp	09-24-2003	mg/L	<0.005			0.0025					
030003498C	1	Comp	10-28-2003	mg/L	<0.005			0.0025					
040003044C	1	Comp	01-21-2004	mg/L	<0.007			0.0035					
MAY 2004	1	Comp	05-04-2004	mg/L	<0.25			0.125					
3RD QUARTER	1	Comp	08-04-2004	mg/L	<0.100			0.05					
OCTOBER 2004	1	Comp	10-14-2004	mg/L	<0.100			0.05					
May 05 Week 3	1	Comp	05-10-2005	mg/L	<0.0050			0.0025					
September 05 Week 2	1	Comp	08-16-2005	mg/L	<0.0060			0.003					
November 05 Week 3	1	Comp	10-28-2005	mg/L	<0.0050			0.0025					
April 06 Week 2	1	Comp	03-28-2006	mg/L	<0.0050			0.0025					
June 06 Week 1	1	Comp	05-16-2006	mg/L	<0.0050			0.0025					
September 06 Week 1	1	Comp	08-11-2006	mg/L	<0.005			0.0025					
November 06 Week 3	1	Comp	10-17-2006	mg/L	<0.005			0.0025					
April 07 Week 1	1	Comp	03-09-2007	mg/L	<0.005			0.0025					
August 07 Week 5	1	Comp	08-16-2007	mg/L	<0.005			0.0025					
November 07 Week 3	1	Comp	10-26-2007	mg/L	<0.007			0.0035					
MARCH 08 WEEK 3	1	Comp	03-21-2008	mg/L	<0.005			0.0025					
JUNE 08 WEEK 4	1	Comp	06-26-2008	mg/L	<0.005			0.0025					
OCTOBER 08 WEEK 2	1	Comp	10-09-2008	mg/L	<0.005			0.0025					

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### Arsenic

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS			
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)
<b>MARCH 09 WEEK 2</b>	1	Comp	03-10-2009	mg/L	<0.005			0.0025		0.47		
PTX-0029-04-121709-1	1	Comp	12-17-2009	mg/L	<0.00500		0.00500	0.0025				
PTX-0029-04-090810-1	1	Comp	09-08-2010	mg/L	<0.00500		0.00500	0.0025				
Total Concentration Results:	<u>29</u>	Avg: <u>.0100483</u>	Min: <u>.0014000</u>	Max: <u>.1250000</u>								
Total Mass Results:	<u>0</u>	Avg:	Min:	Max:								

### Barium

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS			
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)
040003044C	1	Comp	01-21-2004	mg/L	0.136			0.136				
MAY 2004	1	Comp	05-04-2004	mg/L	0.063			0.063				
3RD QUARTER	1	Comp	08-04-2004	mg/L	0.059			0.059				
OCTOBER 2004	1	Comp	10-14-2004	mg/L	0.229			0.229				
May 05 Week 3	1	Comp	05-10-2005	mg/L	<0.018			0.009				
September 05 Week 2	1	Comp	08-16-2005	mg/L	0.191			0.191				
November 05 Week 3	1	Comp	10-28-2005	mg/L	0.237			0.237				
April 06 Week 2	1	Comp	03-28-2006	mg/L	0.0983			0.0983				
June 06 Week 1	1	Comp	05-16-2006	mg/L	0.103			0.103				
September 06 Week 1	1	Comp	08-11-2006	mg/L	0.254			0.254				
November 06 Week 3	1	Comp	10-17-2006	mg/L	0.172			0.172				
April 07 Week 1	1	Comp	03-09-2007	mg/L	0.0754			0.0754				
August 07 Week 5	1	Comp	08-16-2007	mg/L	0.204			0.204				
November 07 Week 3	1	Comp	10-26-2007	mg/L	0.198			0.198				
MARCH 08 WEEK 3	1	Comp	03-21-2008	mg/L	0.066			0.066				
JUNE 08 WEEK 4	1	Comp	06-26-2008	mg/L	0.085			0.085				
OCTOBER 08 WEEK 2	1	Comp	10-09-2008	mg/L	0.179			0.179				
MARCH 09 WEEK 2	1	Comp	03-10-2009	mg/L	0.084			0.084				
PTX-0029-04-121709-1	1	Comp	12-17-2009	mg/L	0.0892			0.0892				
PTX-0029-04-090810-1	1	Comp	09-08-2010	mg/L	0.168			0.168				
Total Concentration Results:	<u>20</u>	Avg: <u>.1349950</u>	Min: <u>.0090000</u>	Max: <u>.2540000</u>								
Total Mass Results:	<u>0</u>	Avg:	Min:	Max:								

Permit: **PTX-0029-04**  
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## BOD

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION				MASS					
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations	Daily Limit	Monthly Limit
020000393A	1	Comp	01-24-2002	mg/L	<2			1							
030000409A	1	Comp	01-29-2003	mg/L	<2			1							
030000688A	1	Comp	02-20-2003	mg/L	<2			1							
030001093A	1	Comp	03-19-2003	mg/L	<2			1							
030001703A	1	Comp	04-25-2003	mg/L	<2			1							
030002183A	1	Comp	05-28-2003	mg/L	<2			1							
030002477A	1	Comp	06-12-2003	mg/L	<2			1							
30003114	1	Comp	09-24-2003	mg/L	2			2							
030003498B	1	Comp	10-28-2003	mg/L	5			5							
040003044B	1	Comp	01-21-2004	mg/L	3			3							
MAY 2004	1	Comp	05-04-2004	mg/L	<6			3							
3RD QUARTER	1	Comp	08-04-2004	mg/L	<6			3							
OCTOBER 2004	1	Comp	10-14-2004	mg/L	13.2			13.2							
May 05 Week 3	1	Comp	05-10-2005	mg/L	<4			2							
September 05 Week 2	1	Comp	08-16-2005	mg/L	15			15							
November 05 Week 3	1	Comp	10-28-2005	mg/L	6			6							
April 06 Week 2	1	Comp	03-28-2006	mg/L	<4			2							
June 06 Week 1	1	Comp	05-16-2006	mg/L	<4			2							
September 06 Week 1	1	Comp	08-11-2006	mg/L	8			8							
November 06 Week 3	1	Comp	10-17-2006	mg/L	<7			3.5							
April 07 Week 1	1	Comp	03-09-2007	mg/L	<4.00			2							
August 07 Week 5	1	Comp	08-16-2007	mg/L	7			7							
MARCH 08 WEEK 3	1	Comp	03-21-2008	mg/L	<6			3							
JUNE 08 WEEK 4	1	Comp	06-26-2008	mg/L	<6			3							
OCTOBER 08 WEEK 2	1	Comp	10-09-2008	mg/L	<6			3							
MARCH 09 WEEK 2	1	Comp	03-10-2009	mg/L	<6			3							
Total Concentration Results: <u>26</u>	Avg: <u>3.6807692</u>	Min: <u>1.0000000</u>	Max: <u>15.0000000</u>												
Total Mass Results: <u>0</u>	Avg:	Min:	Max:												

## Cadmium

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION				MASS					
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations	Daily Limit	Monthly Limit
CTS - Compliance Tracking System															

Permit: **PTX-0029-04**  
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### Cadmium

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS					
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations	Daily Limit
020000393C	1	Comp	01-24-2002	mg/L	0.002			0.002						
030000409C	1	Comp	01-29-2003	mg/L	<0.001			0.0005						
030000688C	1	Comp	02-20-2003	mg/L	<0.001			0.0005						
030001093C	1	Comp	03-19-2003	mg/L	<0.001			0.0005		0.2				
030001703C	1	Comp	04-25-2003	mg/L	<0.001			0.0005		0.2				
030002183C	1	Comp	05-28-2003	mg/L	<0.001			0.0005		0.2				
030002477C	1	Comp	06-12-2003	mg/L	<0.001			0.0005		0.2				
04050223-001	1	Comp	09-24-2003	mg/L	<0.001			0.0005		0.2				
030003498C	1	Comp	10-28-2003	mg/L	<0.001			0.0005		0.2				
040003044C	1	Comp	01-21-2004	mg/L	<0.001			0.0005		0.2				
MAY 2004	1	Comp	05-04-2004	mg/L	<0.010			0.005		0.2				
3RD QUARTER	1	Comp	08-04-2004	mg/L	<0.010			0.005		0.2				
OCTOBER 2004	1	Comp	10-14-2004	mg/L	<0.010			0.005		0.2				
May 05 Week 3	1	Comp	05-10-2005	mg/L	<0.0010			0.0005		0.2				
September 05 Week 2	1	Comp	08-16-2005	mg/L	<0.0010			0.0005		0.2				
November 05 Week 3	1	Comp	10-28-2005	mg/L	<0.0010			0.0005		0.2				
April 06 Week 2	1	Comp	03-28-2006	mg/L	<0.0010			0.0005		0.2				
June 06 Week 1	1	Comp	05-16-2006	mg/L	<0.0010			0.0005		0.2				
September 06 Week 1	1	Comp	08-11-2006	mg/L	<0.0010			0.0005		0.2				
November 06 Week 3	1	Comp	10-17-2006	mg/L	<0.0002			0.0001		0.2				
April 07 Week 1	1	Comp	03-09-2007	mg/L	<0.001			0.0005		0.2				
August 07 Week 5	1	Comp	08-16-2007	mg/L	<0.001			0.0005		0.2				
November 07 Week 3	1	Comp	10-26-2007	mg/L	<0.001			0.0005		0.2				
MARCH 08 WEEK 3	1	Comp	03-21-2008	mg/L	<0.003			0.0015		0.2				
JUNE 08 WEEK 4	1	Comp	06-26-2008	mg/L	<0.010			0.005		0.2				
OCTOBER 08 WEEK 2	1	Comp	10-09-2008	mg/L	<0.010			0.005		0.2				
MARCH 09 WEEK 2	1	Comp	03-10-2009	mg/L	<0.010			0.005		0.2				
PTX-0029-04-121709-1	1	Comp	12-17-2009	mg/L	0.000380			0.000380		0.24				
PTX-0029-04-090810-1	1	Comp	09-08-2010	mg/L	<0.000500		0.00050	0.00025		0.24				
Total Concentration Results:	29	Avg:	.0014907	Min:	.0001000	Max:	.0050000							
Total Mass Results:	0	Avg:		Min:		Max:								

Permit: **PTX-0029-04**  
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## Chlorine

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS			
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)
May 05 Week 3	1	Grab	05-10-2005	mg/L	<0.5			0.25				
September 05 Week 2	1	Grab	08-16-2005	mg/L	<0.05			0.025				
November 05 Week 3	1	Grab	10-28-2005	mg/L	<0.05			0.025				
April 06 Week 2	1	Grab	03-28-2006	mg/L	0.05			0.05				
June 06 Week 1	1	Grab	05-16-2006	mg/L	0.04			0.04				
September 06 Week 1	1	Grab	08-11-2006	mg/L	0.15			0.15				
November 06 Week 3	1	Grab	10-17-2006	mg/L	<0.0500			0.025				
April 07 Week 1	1	Grab	03-09-2007	mg/L	0			0				
August 07 Week 5	1	Grab	08-16-2007	mg/L	0.05			0.05				
November 07 Week 3	1	Grab	10-26-2007	mg/L	0			0				
MARCH 08 WEEK 3	1	Grab	03-21-2008	mg/L	0.11			0.11				
JUNE 08 WEEK 4	1	Grab	06-26-2008	mg/L	0.22			0.22				
OCTOBER 08 WEEK 2	1	Grab	10-09-2008	mg/L	0.17			0.17				
MARCH 09 WEEK 2	1	Grab	03-10-2009	mg/L	0.09			0.09				
Total Concentration Results:	14	Avg: .0860714	Min: .0000000	Max: .2500000								
Total Mass Results:	0	Avg:	Min:	Max:								

## Chromium

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS			
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)
020000393C	1	Comp	01-24-2002	mg/L	0.0023			0.0023				
030000409C	1	Comp	01-29-2003	mg/L	<0.002			0.001				
030000688C	1	Comp	02-20-2003	mg/L	<0.002			0.001				
030001093C	1	Comp	03-19-2003	mg/L	<0.002			0.001		9.59		
030001703C	1	Comp	04-25-2003	mg/L	<0.002			0.001		9.59		
030002183C	1	Comp	05-28-2003	mg/L	<0.002			0.001		9.59		
030002477C	1	Comp	06-12-2003	mg/L	<0.005			0.0025		9.59		
04050223-001	1	Comp	09-24-2003	mg/L	<0.005			0.0025		9.59		
030003498C	1	Comp	10-28-2003	mg/L	<0.005			0.0025		9.59		
040003044C	1	Comp	01-21-2004	mg/L	<0.001			0.0005		9.59		
MAY 2004	1	Comp	05-04-2004	mg/L	<0.010			0.005		9.59		
3RD QUARTER	1	Comp	08-04-2004	mg/L	0.010			0.010		9.59		

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### Chromium

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS			
						Reslt Flags	Reporting Limit	Adjusted Result	Daily Limit	Monthly Limit	Result (lbs/day)	Violations
OCTOBER 2004	1	Comp	10-14-2004	mg/L	<0.010			0.005	9.59			
May 05 Week 3	1	Comp	05-10-2005	mg/L	<0.0020			0.001	9.59			
September 05 Week 2	1	Comp	08-16-2005	mg/L	<0.0020			0.001	9.59			
November 05 Week 3	1	Comp	10-28-2005	mg/L	<0.0020			0.001	9.59			
April 06 Week 2	1	Comp	03-28-2006	mg/L	<0.0020			0.001	9.59			
June 06 Week 1	1	Comp	05-16-2006	mg/L	<0.0020			0.001	9.59			
September 06 Week 1	1	Comp	08-11-2006	mg/L	<0.0020			0.001	9.59			
November 06 Week 3	1	Comp	10-17-2006	mg/L	<0.002			0.001	9.59			
April 07 Week 1	1	Comp	03-09-2007	mg/L	<0.01			0.005	9.59			
August 07 Week 5	1	Comp	08-16-2007	mg/L	<0.005			0.0025	9.59			
November 07 Week 3	1	Comp	10-26-2007	mg/L	<0.01			0.005	9.59			
MARCH 08 WEEK 3	1	Comp	03-21-2008	mg/L	<0.007			0.0035	9.59			
JUNE 08 WEEK 4	1	Comp	06-26-2008	mg/L	<0.010			0.005	9.59			
OCTOBER 08 WEEK 2	1	Comp	10-09-2008	mg/L	<0.010			0.005	9.59			
MARCH 09 WEEK 2	1	Comp	03-10-2009	mg/L	<0.010			0.005	9.59			
PTX-0029-04-121709-1	1	Comp	12-17-2009	mg/L	<0.00500	0.00500	0.0025		4.76			
PTX-0029-04-090810-1	1	Comp	09-08-2010	mg/L	0.000730		0.000730		4.76			
Total Concentration Results: <u>29</u>	Avg: <u>.0026390</u>		Min: <u>.0005000</u>		Max: <u>.0100000</u>							
Total Mass Results: <u>0</u>	Avg:		Min:		Max:							

### COD

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS			
						Reslt Flags	Reporting Limit	Adjusted Result	Daily Limit	Monthly Limit	Result (lbs/day)	Violations
020000393B	1	Comp	01-24-2002	mg/L	<75			37.5				
030000409B	1	Comp	01-29-2003	mg/L	33			33				
030000688B	1	Comp	02-20-2003	mg/L	38			38				
030001093B	1	Comp	03-19-2003	mg/L	36			36	10000			
030001703B	1	Comp	04-25-2003	mg/L	17			17	10000			
030002183B	1	Comp	05-28-2003	mg/L	33			33	10000			
030002477B	1	Comp	06-12-2003	mg/L	28			28	10000			
30003114	1	Comp	09-24-2003	mg/L	38.4			38.4	10000			
030003498A	1	Comp	10-28-2003	mg/L	36			36	10000			

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## COD

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION				MASS				
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations	Daily Limit
040003044A	1	Comp	01-21-2004	mg/L	29			29		10000				
MAY 2004	1	Comp	05-04-2004	mg/L	30.0			30.0		10000				
3RD QUARTER	1	Comp	08-04-2004	mg/L	24.0			24.0		10000				
OCTOBER 2004	1	Comp	10-14-2004	mg/L	83.0			83.0		10000				
May 05 Week 3	1	Comp	05-10-2005	mg/L	<10			5		10000				
September 05 Week 2	1	Comp	08-16-2005	mg/L	75			75		10000				
November 05 Week 3	1	Comp	10-28-2005	mg/L	60			60		10000				
April 06 Week 2	1	Comp	03-28-2006	mg/L	46			46		10000				
June 06 Week 1	1	Comp	05-16-2006	mg/L	32			32		10000				
September 06 Week 1	1	Comp	08-11-2006	mg/L	52			52		10000				
April 07 Week 1	1	Comp	03-09-2007	mg/L	37.4			37.4		10000				
November 07 Week 3	1	Comp	10-26-2007	mg/L	70.9			70.9		10000				
MARCH 08 WEEK 3	1	Comp	03-21-2008	mg/L	15			15		10000				
JUNE 08 WEEK 4	1	Comp	06-26-2008	mg/L	28			28		10000				
OCTOBER 08 WEEK 2	1	Comp	10-09-2008	mg/L	29			29		10000				
MARCH 09 WEEK 2	1	Comp	03-10-2009	mg/L	27			27		10000				
Total Concentration Results: 25		Avg:	37.6080000	Min:	5.0000000	Max:	83.0000000							
Total Mass Results: 0		Avg:		Min:		Max:								

## Copper

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION				MASS				
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations	Daily Limit
020000393C	1	Comp	01-24-2002	mg/L	0.0076			0.0076						
030000409C	1	Comp	01-29-2003	mg/L	0.0055			0.0055						
030000688C	1	Comp	02-20-2003	mg/L	<0.005			0.0025						
030001093C	1	Comp	03-19-2003	mg/L	<0.005			0.0025		3.84				
030001703C	1	Comp	04-25-2003	mg/L	<0.005			0.0025		3.84				
030002183C	1	Comp	05-28-2003	mg/L	<0.005			0.0025		3.84				
030002477C	1	Comp	06-12-2003	mg/L	0.0055			0.0055		3.84				
04050223-001	1	Comp	09-24-2003	mg/L	0.0088			0.0088		3.84				
030003498C	1	Comp	10-28-2003	mg/L	0.0117			0.0117		3.84				
040003044C	1	Comp	01-21-2004	mg/L	0.00258			0.00258		3.84				

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### Copper

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS			
						Reslt Flags	Reporting Limit	Adjusted Result	Daily Limit	Monthly Limit	Result (lbs/day)	Violations
MAY 2004	1	Comp	05-04-2004	mg/L	<0.010			0.005	3.84			
3RD QUARTER	1	Comp	08-04-2004	mg/L	0.015			0.015	3.84			
OCTOBER 2004	1	Comp	10-14-2004	mg/L	0.012			0.012	3.84			
May 05 Week 3	1	Comp	05-10-2005	mg/L	<0.0050			0.0025	3.84			
September 05 Week 2	1	Comp	08-16-2005	mg/L	0.0202			0.0202	3.84			
November 05 Week 3	1	Comp	10-28-2005	mg/L	<0.0050			0.0025	3.84			
April 06 Week 2	1	Comp	03-28-2006	mg/L	<0.0050			0.0025	3.84			
June 06 Week 1	1	Comp	05-16-2006	mg/L	0.0052			0.0052	3.84			
September 06 Week 1	1	Comp	08-11-2006	mg/L	0.0099			0.0099	3.84			
November 06 Week 3	1	Comp	10-17-2006	mg/L	0.0147			0.0147	3.84			
April 07 Week 1	1	Comp	03-09-2007	mg/L	<0.005			0.0025	3.84			
August 07 Week 5	1	Comp	08-16-2007	mg/L	0.0138			0.0138	3.84			
November 07 Week 3	1	Comp	10-26-2007	mg/L	0.00924			0.00924	3.84			
MARCH 08 WEEK 3	1	Comp	03-21-2008	mg/L	<0.008			0.004	3.84			
JUNE 08 WEEK 4	1	Comp	06-26-2008	mg/L	<0.010			0.005	3.84			
OCTOBER 08 WEEK 2	1	Comp	10-09-2008	mg/L	0.025			0.025	3.84			
MARCH 09 WEEK 2	1	Comp	03-10-2009	mg/L	0.01			0.01	3.84			
PTX-0029-04-121709-1	1	Comp	12-17-2009	mg/L	0.0102			0.0102	2.08			
PTX-0029-04-090810-1	1	Comp	09-08-2010	mg/L	0.0132			0.0132	2.08			
Total Concentration Results: 29	Avg: .0080731	Min: .0025000	Max: .0250000									
Total Mass Results: 0	Avg:	Min:	Max:									

### Cyanide

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS			
						Reslt Flags	Reporting Limit	Adjusted Result	Daily Limit	Monthly Limit	Result (lbs/day)	Violations
30000411	1	Grab	01-29-2003	mg/L	<0.005			0.0025				
30000693	1	Grab	02-20-2003	mg/L	<0.005			0.0025				
30001095	1	Grab	03-19-2003	mg/L	<0.005			0.0025	0.37			
30001705	1	Grab	04-25-2003	mg/L	0.015			0.015	0.37			
30002185	1	Grab	05-28-2003	mg/L	<0.005			0.0025	0.37			
04050221-001	1	Grab	09-24-2003	mg/L	<0.005			0.0025	0.37			
30003501	1	Grab	10-28-2003	mg/L	<0.005			0.0025	0.37			

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### Cyanide

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS					
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations	Daily Limit
40003046	1	Grab	01-21-2004	mg/L	<0.005			0.0025		0.37				
MAY 2004	1	Grab	05-04-2004	mg/L	<0.005			0.0025		0.37				
3RD QUARTER	1	Grab	08-04-2004	mg/L	<0.005			0.0025		0.37				
OCTOBER 2004	1	Grab	10-14-2004	mg/L	<0.005			0.0025		0.37				
May 05 Week 3	1	Grab	05-10-2005	mg/L	<0.005			0.0025		0.37				
September 05 Week 2	1	Grab	08-16-2005	mg/L	<0.005			0.0025		0.37				
November 05 Week 3	1	Grab	10-28-2005	mg/L	<0.005			0.0025		0.37				
April 06 Week 2	1	Grab	03-28-2006	mg/L	<0.005			0.0025		0.37				
June 06 Week 1	1	Grab	05-16-2006	mg/L	0.008			0.008		0.37				
August 07 Week 5	1	Grab	08-16-2007	mg/L	<0.00500			0.0025		0.37				
November 07 Week 3	1	Grab	10-26-2007	mg/L	<0.00500			0.0025		0.37				
MARCH 08 WEEK 3	1	Grab	03-21-2008	mg/L	<0.050			0.025		0.37				
JUNE 08 WEEK 4	1	Grab	06-26-2008	mg/L	<0.050			0.025		0.37				
OCTOBER 08 WEEK 2	1	Grab	10-09-2008	mg/L	<0.050			0.025		0.37				
MARCH 09 WEEK 2	1	Grab	03-10-2009	mg/L	<0.050			0.025		0.37				
Total Concentration Results: <u>22</u>	Avg: <u>.0074091</u>		Min: <u>.0025000</u>		Max: <u>.0250000</u>									
Total Mass Results: <u>0</u>	Avg:		Min:		Max:									

### Cyanide, Free

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS					
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations	Daily Limit
June 06 Week 1	1	Grab	05-16-2006	mg/L	0.008			0.008						
September 06 Week 1	1	Grab	08-11-2006	mg/L	<0.005			0.0025						
November 06 Week 3	1	Grab	10-17-2006	mg/L	<0.00500			0.0025						
April 07 Week 1	1	Grab	03-09-2007	mg/L	<0.00500			0.0025						
Total Concentration Results: <u>4</u>	Avg: <u>.0038750</u>		Min: <u>.0025000</u>		Max: <u>.0080000</u>									
Total Mass Results: <u>0</u>	Avg:		Min:		Max:									

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### Hexavalent Chrome

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS					
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations	Daily Limit
30000412	1	Grab	01-29-2003	mg/L	<0.01			0.005						
30000672	1	Grab	02-19-2003	mg/L	<0.01			0.005						
30001096	1	Grab	03-19-2003	mg/L	<0.01			0.005						
30002186	1	Grab	05-28-2003	mg/L	<0.01			0.005						
04050220-001	1	Grab	09-24-2003	mg/L	<0.010			0.005						
40003047	1	Grab	01-21-2004	mg/L	<0.010			0.005						
MAY 2004	1	Grab	05-04-2004	mg/L	<0.02			0.01						
3RD QUARTER	1	Grab	08-04-2004	mg/L	<0.02			0.01						
OCTOBER 2004	1	Grab	10-14-2004	mg/L	<0.02			0.01						
May 05 Week 3	1	Grab	05-10-2005	mg/L	<0.010			0.005						
September 05 Week 2	1	Grab	08-16-2005	mg/L	<0.010			0.005						
November 05 Week 3	1	Grab	10-28-2005	mg/L	<0.010			0.005						
April 06 Week 2	1	Grab	03-28-2006	mg/L	<0.010			0.005						
June 06 Week 1	1	Grab	05-16-2006	mg/L	<0.010			0.005						
September 06 Week 1	1	Grab	08-11-2006	mg/L	<0.010			0.005						
November 06 Week 3	1	Grab	10-17-2006	mg/L	<0.0105			0.00525						
April 07 Week 1	1	Grab	03-09-2007	mg/L	<0.0100			0.005						
August 07 Week 5	1	Grab	08-16-2007	mg/L	0.0285			0.0285						
November 07 Week 3	1	Grab	10-26-2007	mg/L	<0.0105			0.00525						
MARCH 08 WEEK 3	1	Grab	03-21-2008	mg/L	<0.02			0.01						
JUNE 08 WEEK 4	1	Grab	06-26-2008	mg/L	<0.02			0.01						
OCTOBER 08 WEEK 2	1	Grab	10-09-2008	mg/L	<0.02			0.01						
MARCH 09 WEEK 2	1	Grab	03-10-2009	mg/L	<0.03			0.015						
Total Concentration Results: <u>23</u>	Avg: <u>.0077826</u>	Min: <u>.0050000</u>	Max: <u>.0285000</u>											
Total Mass Results: <u>0</u>	Avg:	Min:	Max:											

### Lead

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS					
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations	Daily Limit
020000393C	1	Comp	01-24-2002	mg/L	<0.007			0.0035						
030000409C	1	Comp	01-29-2003	mg/L	<0.001			0.0005						
030000688C	1	Comp	02-20-2003	mg/L	0.0016			0.0016						

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## Lead

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION				MASS				
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations	Daily Limit
030001093C	1	Comp	03-19-2003	mg/L	0.001			0.001		1.4				
030001703C	1	Comp	04-25-2003	mg/L	<0.001			0.0005		1.4				
030002183C	1	Comp	05-28-2003	mg/L	<0.002			0.001		1.4				
030002477C	1	Comp	06-12-2003	mg/L	0.0011			0.0011		1.4				
04050223-001	1	Comp	09-24-2003	mg/L	0.0021			0.0021		1.4				
030003498C	1	Comp	10-28-2003	mg/L	0.0045			0.0045		1.4				
040003044C	1	Comp	01-21-2004	mg/L	<0.007			0.0035		1.4				
MAY 2004	1	Comp	05-04-2004	mg/L	<0.010			0.005		1.4				
3RD QUARTER	1	Comp	08-04-2004	mg/L	<0.020			0.01		1.4				
OCTOBER 2004	1	Comp	10-14-2004	mg/L	<0.020			0.01		1.4				
May 05 Week 3	1	Comp	05-10-2005	mg/L	<0.0010			0.0005		1.4				
September 05 Week 2	1	Comp	08-16-2005	mg/L	<0.0010			0.0005		1.4				
November 05 Week 3	1	Comp	10-28-2005	mg/L	<0.0010			0.0005		1.4				
April 06 Week 2	1	Comp	03-28-2006	mg/L	<0.0010			0.0005		1.4				
June 06 Week 1	1	Comp	05-16-2006	mg/L	<0.0010			0.0005		1.4				
September 06 Week 1	1	Comp	08-11-2006	mg/L	<0.001			0.0005		1.4				
November 06 Week 3	1	Comp	10-17-2006	mg/L	0.00181			0.00181		1.4				
April 07 Week 1	1	Comp	03-09-2007	mg/L	<0.001			0.0005		1.4				
August 07 Week 5	1	Comp	08-16-2007	mg/L	<0.001			0.0005		1.4				
November 07 Week 3	1	Comp	10-26-2007	mg/L	0.0011			0.0011		1.4				
MARCH 08 WEEK 3	1	Comp	03-21-2008	mg/L	<0.010			0.005		1.4				
JUNE 08 WEEK 4	1	Comp	06-26-2008	mg/L	0.023			0.023		1.4				
OCTOBER 08 WEEK 2	1	Comp	10-09-2008	mg/L	0.02			0.02		1.4				
MARCH 09 WEEK 2	1	Comp	03-10-2009	mg/L	0.011			0.011		1.4				
PTX-0029-04-121709-1	1	Comp	12-17-2009	mg/L	<0.00500	0.00500		0.0025		0.74				
PTX-0029-04-090810-1	1	Comp	09-08-2010	mg/L	0.00105			0.00105		0.74				
Total Concentration Results: 29		Avg: .0039228	Min: .0005000	Max: .0230000										
Total Mass Results: 0		Avg:	Min:	Max:										

## Mercury

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION				MASS				
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations	Daily Limit
CTS - Compliance Tracking System														

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### Mercury

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS			
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)
020000393C	1	Comp	01-24-2002	mg/L	0.0002			0.0002				
030000409C	1	Comp	01-29-2003	mg/L	<0.0002			0.0001				
030000688C	1	Comp	02-20-2003	mg/L	<0.0002			0.0001				
030001093C	1	Comp	03-19-2003	mg/L	<0.0002			0.0001		0.00368		
030001703C	1	Comp	04-25-2003	mg/L	<0.0002			0.0001		0.00368		
030002183C	1	Comp	05-28-2003	mg/L	<0.0002			0.0001		0.00368		
030002477C	1	Comp	06-12-2003	mg/L	<0.0002			0.0001		0.00368		
04050223-001	1	Comp	09-24-2003	mg/L	<0.2			0.1	D T	0.00368		
030003498C	1	Comp	10-28-2003	mg/L	<0.0002			0.0001		0.00368		
040003044D	1	Comp	01-21-2004	mg/L	<0.0002			0.0001		0.00368		
MARCH 08 WEEK 3	1	Grab	03-21-2008	mg/L	<0.00020	C		0.0001		0.00368		
JUNE 08 WEEK 4	1	Comp	06-26-2008	mg/L	<0.00020			0.0001		0.00368		
OCTOBER 08 WEEK 2	1	Comp	10-09-2008	mg/L	<0.00020			0.0001		0.00368		
MARCH 09 WEEK 2	1	Comp	03-10-2009	mg/L	<0.00020			0.0001		0.00368		
PTX-0029-04-121709-1	1	Comp	12-17-2009	mg/L	0.000113			0.000113		0.0009		
PTX-0029-04-090810-1	1	Comp	09-08-2010	mg/L	<0.000200	0.00020	0.0001			0.0009		
Total Concentration Results: 16	Avg:	.0063508	Min:	.0001000	Max:	1000000						
Total Mass Results: 0	Avg:		Min:		Max:							

### Mercury Low Level method 1631

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS		
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit
May 05 Week 2	1	Grab	05-10-2005	mg/L	0.00000119			0.00000119		0.00368	
August 05 Week 4	1	Grab	08-16-2005	mg/L	0.00000194			0.00000194		0.00368	
November 05 Week 2	1	Grab	10-28-2005	mg/L	0.00000058			0.00000058		0.00368	
APRIL 06 WEEK 3	1	Grab	03-28-2006	mg/L	0.00000197			0.00000197		0.00368	
June 06 Week 1	1	Grab	05-16-2006	mg/L	0.00000235			0.00000235		0.00368	
August 06 Week 5	1	Grab	08-11-2006	mg/L	0.00000095			0.00000095		0.00368	
November 06 Week 3	1	Grab	10-17-2006	mg/L	0.00000295			0.00000295		0.00368	
April 07 Week 1	1	Grab	03-09-2007	mg/L	0.00000171			0.00000171		0.00368	
August 07 Week 5	1	Grab	08-16-2007	mg/L	0.0000018			0.0000018		0.00368	
November 07 Week 3	1	Grab	10-26-2007	mg/L	0.0000028			0.0000028		0.00368	

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### Mercury Low Level method 1631

Sample ID	MonPoint	Collection Method	Collection Date	CONCENTRATION					MASS				
				Units	Result	Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations
Total Concentration Results:	10	Avg: .0000018	Min: .0000006	Max: .0000030									
Total Mass Results:	0	Avg:	Min:	Max:									

### Methylene Blue Activated Subst

Sample ID	MonPoint	Collection Method	Collection Date	CONCENTRATION					MASS				
				Units	Result	Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations
020000393F	1	Comp	01-24-2002	mg/L	0.24			0.24					
Total Concentration Results:	1	Avg: .2400000	Min: .2400000	Max: .2400000									
Total Mass Results:	0	Avg:	Min:	Max:									

### Molybdenum

Sample ID	MonPoint	Collection Method	Collection Date	CONCENTRATION					MASS				
				Units	Result	Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations
020000393C	1	Comp	01-24-2002	mg/L	0.0038			0.0038					
030000409C	1	Comp	01-29-2003	mg/L	0.0017			0.0017					
030000688C	1	Comp	02-20-2003	mg/L	0.0014			0.0014					
030001093C	1	Comp	03-19-2003	mg/L	0.0016			0.0016		1.81			
030001703C	1	Comp	04-25-2003	mg/L	0.0012			0.0012		1.81			
030002183C	1	Comp	05-28-2003	mg/L	0.0018			0.0018		1.81			
030002477C	1	Comp	06-12-2003	mg/L	0.0017			0.0017		1.81			
04050223-001	1	Comp	09-24-2003	mg/L	0.001			0.001		1.81			
030003498C	1	Comp	10-28-2003	mg/L	0.0013			0.0013		1.81			
040003044C	1	Comp	01-21-2004	mg/L	0.00119			0.00119		1.81			
MAY 2004	1	Comp	05-04-2004	mg/L	<0.030			0.015		1.81			
3RD QUARTER	1	Comp	08-04-2004	mg/L	<0.010			0.005		1.81			
OCTOBER 2004	1	Comp	10-14-2004	mg/L	<0.020			0.01		1.81			
May 05 Week 3	1	Comp	05-10-2005	mg/L	<0.0010			0.0005		1.81			
September 05 Week 2	1	Comp	08-16-2005	mg/L	0.002			0.002		1.81			
November 05 Week 3	1	Comp	10-28-2005	mg/L	0.0014			0.0014		1.81			

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### Molybdenum

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS		
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit
April 06 Week 2	1	Comp	03-28-2006	mg/L	0.0011			0.0011		1.81	
June 06 Week 1	1	Comp	05-16-2006	mg/L	0.0013			0.0013		1.81	
September 06 Week 1	1	Comp	08-11-2006	mg/L	0.002			0.002		1.81	
November 06 Week 3	1	Comp	10-17-2006	mg/L	<0.001			0.0005		1.81	
April 07 Week 1	1	Comp	03-09-2007	mg/L	0.00117			0.00117		1.81	
August 07 Week 5	1	Comp	08-16-2007	mg/L	0.00219			0.00219		1.81	
November 07 Week 3	1	Comp	10-26-2007	mg/L	0.00122			0.00122		1.81	
MARCH 08 WEEK 3	1	Comp	03-21-2008	mg/L	<0.020			0.01		1.81	
JUNE 08 WEEK 4	1	Comp	06-26-2008	mg/L	0.013			0.013		1.81	
OCTOBER 08 WEEK 2	1	Comp	10-09-2008	mg/L	<0.010			0.005		1.81	
MARCH 09 WEEK 2	1	Comp	03-10-2009	mg/L	<0.010			0.005		1.81	
PTX-0029-04-121709-1	1	Comp	12-17-2009	mg/L	<0.00500	0.00500	0.0025				
PTX-0029-04-090810-1	1	Comp	09-08-2010	mg/L	<0.00500	0.00500	0.0025				
Total Concentration Results:	29	Avg:	<u>.0033817</u>	Min:	<u>.0005000</u>	Max:	<u>.0150000</u>				
Total Mass Results:	0	Avg:		Min:		Max:					

### Nickel

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS		
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit
020000393C	1	Comp	01-24-2002	mg/L	0.0109			0.0109			
030000409C	1	Comp	01-29-2003	mg/L	0.02			0.02			
030000688C	1	Comp	02-20-2003	mg/L	0.016			0.016			
030001093C	1	Comp	03-19-2003	mg/L	0.018			0.018		3.43	
030001703C	1	Comp	04-25-2003	mg/L	0.0133			0.0133		3.43	
030002183C	1	Comp	05-28-2003	mg/L	0.0218			0.0218		3.43	
030002477C	1	Comp	06-12-2003	mg/L	0.0248			0.0248		3.43	
04050223-001	1	Comp	09-24-2003	mg/L	0.0154			0.0154		3.43	
030003498C	1	Comp	10-28-2003	mg/L	0.0204			0.0204		3.43	
040003044C	1	Comp	01-21-2004	mg/L	0.00533			0.00533		3.43	
MAY 2004	1	Comp	05-04-2004	mg/L	<0.010			0.005		3.43	
3RD QUARTER	1	Comp	08-04-2004	mg/L	0.011			0.011		3.43	
OCTOBER 2004	1	Comp	10-14-2004	mg/L	0.014			0.014		3.43	

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## Nickel

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS		
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit
May 05 Week 3	1	Comp	05-10-2005	mg/L	<0.0050			0.0025		3.43	
September 05 Week 2	1	Comp	08-16-2005	mg/L	0.0141			0.0141		3.43	
November 05 Week 3	1	Comp	10-28-2005	mg/L	0.009			0.009		3.43	
April 06 Week 2	1	Comp	03-28-2006	mg/L	0.0068			0.0068		3.43	
June 06 Week 1	1	Comp	05-16-2006	mg/L	0.0088			0.0088		3.43	
September 06 Week 1	1	Comp	08-11-2006	mg/L	0.0155			0.0155		3.43	
November 06 Week 3	1	Comp	10-17-2006	mg/L	0.0104			0.0104		3.43	
April 07 Week 1	1	Comp	03-09-2007	mg/L	0.00657			0.00657		3.43	
August 07 Week 5	1	Comp	08-16-2007	mg/L	0.0182			0.0182		3.43	
November 07 Week 3	1	Comp	10-26-2007	mg/L	0.00714			0.00714		3.43	
MARCH 08 WEEK 3	1	Comp	03-21-2008	mg/L	<0.008			0.004		3.43	
JUNE 08 WEEK 4	1	Comp	06-26-2008	mg/L	<0.100			0.05		3.43	
OCTOBER 08 WEEK 2	1	Comp	10-09-2008	mg/L	<0.100			0.05		3.43	
MARCH 09 WEEK 2	1	Comp	03-10-2009	mg/L	<0.100			0.05		3.43	
PTX-0029-04-121709-1	1	Comp	12-17-2009	mg/L	0.00596			0.00596		3.57	
PTX-0029-04-090810-1	1	Comp	09-08-2010	mg/L	0.0170			0.0170		3.57	
Total Concentration Results:	29	Avg:	<u>.0162724</u>	Min:	<u>.0025000</u>	Max:	<u>.0500000</u>				
Total Mass Results:	0	Avg:		Min:		Max:					

## pH

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS		
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit
MAY 2004	1	Grab	05-04-2004	S.U.	6.71			6.71			
3RD QUARTER	1	Grab	08-04-2004	S.U.	6.63			6.63			
OCTOBER 2004	1	Grab	10-14-2004	S.U.	6.75			6.75			
May 05 Week 3	1	Grab	05-10-2005	S.U.	7			7			
September 05 Week 2	1	Grab	08-16-2005	S.U.	7			7			
November 05 Week 3	1	Grab	10-28-2005	S.U.	6.92			6.92			
April 06 Week 2	1	Grab	03-28-2006	S.U.	6.32			6.32			
June 06 Week 1	1	Grab	05-16-2006	S.U.	9.95			9.95			
September 06 Week 1	1	Grab	08-11-2006	S.U.	6.92			6.92			
November 06 Week 3	1	Grab	10-17-2006	S.U.	7.05			7.05			

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### pH

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS			
						Reslt Flags	Reporting Limit	Adjusted Result	Daily Limit	Monthly Limit	Result (lbs/day)	Violations
April 07 Week 1	1	Grab	03-09-2007	S.U.	7.36			7.36				
August 07 Week 5	1	Grab	08-16-2007	S.U.	7.05			7.05				
November 07 Week 3	1	Grab	10-26-2007	S.U.	6.54			6.54				
MARCH 08 WEEK 3	1	Grab	03-21-2008	S.U.	6.78			6.78				
JUNE 08 WEEK 4	1	Grab	06-26-2008	S.U.	6.7			6.7				
OCTOBER 08 WEEK 2	1	Grab	10-09-2008	S.U.	6.62			6.62				
MARCH 09 WEEK 2	1	Grab	03-10-2009	S.U.	7.44			7.44				
Total Concentration Results:	17	Avg:	7.0435294	Min: 6.3200000	Max: 9.9500000							
Total Mass Results:	0	Avg:		Min:	Max:							

### Phosphorous

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS			
						Reslt Flags	Reporting Limit	Adjusted Result	Daily Limit	Monthly Limit	Result (lbs/day)	Violations
020000393E	1	Comp	01-24-2002	mg/L	0.11			0.11				
030000409D	1	Comp	01-29-2003	mg/L	<0.1			0.05				
030000688D	1	Comp	02-20-2003	mg/L	0.19			0.19				
030001093D	1	Comp	03-19-2003	mg/L	<0.1			0.05				
030001703D	1	Comp	04-25-2003	mg/L	<0.1			0.05				
030002183D	1	Comp	05-28-2003	mg/L	<0.1			0.05				
030002477D	1	Comp	06-12-2003	mg/L	0.06			0.06				
30003114	1	Comp	09-24-2003	mg/L	<0.10			0.05				
030003498D	1	Comp	10-28-2003	mg/L	<0.1			0.05				
040003044F	1	Comp	01-21-2004	mg/L	<0.10			0.05				
MAY 2004	1	Comp	05-04-2004	mg/L	0.030			0.030				
3RD QUARTER	1	Comp	08-04-2004	mg/L	0.234			0.234				
OCTOBER 2004	1	Comp	10-14-2004	mg/L	0.082			0.082				
May 05 Week 3	1	Comp	05-10-2005	mg/L	0.16			0.16				
September 05 Week 2	1	Comp	08-16-2005	mg/L	0.14			0.14				
November 05 Week 3	1	Comp	10-28-2005	mg/L	<0.10			0.05				
April 06 Week 2	1	Comp	03-28-2006	mg/L	<0.10			0.05				
June 06 Week 1	1	Comp	05-16-2006	mg/L	<0.10			0.05				
September 06 Week 1	1	Comp	08-11-2006	mg/L	<0.10			0.05				

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## Phosphorous

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION				MASS					
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations	Daily Limit	Monthly Limit
November 06 Week 3	1	Comp	10-17-2006	mg/L	<0.100			0.05							
April 07 Week 1	1	Comp	03-09-2007	mg/L	<0.100			0.05							
August 07 Week 5	1	Comp	08-16-2007	mg/L	0.164			0.164							
November 07 Week 3	1	Comp	10-26-2007	mg/L	0.507			0.507							
MARCH 08 WEEK 3	1	Comp	03-21-2008	mg/L	0.053			0.053							
JUNE 08 WEEK 4	1	Comp	06-26-2008	mg/L	0.074			0.074							
OCTOBER 08 WEEK 2	1	Comp	10-09-2008	mg/L	0.142			0.142							
MARCH 09 WEEK 2	1	Comp	03-10-2009	mg/L	0.062			0.062							
Total Concentration Results: 27	Avg: .0984444	Min: .0300000	Max: .5070000												
Total Mass Results: 0	Avg:	Min:	Max:												

## Selenium

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION				MASS					
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations	Daily Limit	Monthly Limit
020000393C	1	Comp	01-24-2002	mg/L	<0.004			0.002							
030000409C	1	Comp	01-29-2003	mg/L	<0.005			0.0025							
030000688C	1	Comp	02-20-2003	mg/L	<0.005			0.0025							
030001093C	1	Comp	03-19-2003	mg/L	<0.005			0.0025							
030001703C	1	Comp	04-25-2003	mg/L	<0.005			0.0025							
030002183C	1	Comp	05-28-2003	mg/L	<0.005			0.0025							
030002477C	1	Comp	06-12-2003	mg/L	<0.005			0.0025							
04050223-001	1	Comp	09-24-2003	mg/L	<0.01			0.005							
030003498C	1	Comp	10-28-2003	mg/L	<0.005			0.0025							
040003044C	1	Comp	01-21-2004	mg/L	<0.011			0.0055							
MAY 2004	1	Comp	05-04-2004	mg/L	<0.25			0.125							
3RD QUARTER	1	Comp	08-04-2004	mg/L	<0.100			0.05							
OCTOBER 2004	1	Comp	10-14-2004	mg/L	<0.250			0.125							
May 05 Week 3	1	Comp	05-10-2005	mg/L	<0.0050			0.0025							
September 05 Week 2	1	Comp	08-16-2005	mg/L	<0.012			0.006							
November 05 Week 3	1	Comp	10-28-2005	mg/L	<0.0050			0.0025							
April 06 Week 2	1	Comp	03-28-2006	mg/L	<0.0050			0.0025							
June 06 Week 1	1	Comp	05-16-2006	mg/L	<0.0060			0.003							

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### Selenium

Sample ID	MonPoint	Collection Method	Collection Date	CONCENTRATION					MASS				
				Units	Result	Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations
September 06 Week 1	1	Comp	08-11-2006	mg/L	<0.007			0.0035		0.28			
November 06 Week 3	1	Comp	10-17-2006	mg/L	<0.005			0.0025		0.28			
April 07 Week 1	1	Comp	03-09-2007	mg/L	<0.005			0.0025		0.28			
August 07 Week 5	1	Comp	08-16-2007	mg/L	0.00766			0.00766		0.28			
November 07 Week 3	1	Comp	10-26-2007	mg/L	<0.005			0.0025		0.28			
MARCH 08 WEEK 3	1	Comp	03-21-2008	mg/L	<0.004			0.002		0.28			
JUNE 08 WEEK 4	1	Comp	06-26-2008	mg/L	<0.004			0.002		0.28			
OCTOBER 08 WEEK 2	1	Comp	10-09-2008	mg/L	<0.004			0.002		0.28			
MARCH 09 WEEK 2	1	Comp	03-10-2009	mg/L	<0.004			0.002		0.28			
PTX-0029-04-121709-1	1	Comp	12-17-2009	mg/L	<0.0100		0.0100	0.005		0.14			
PTX-0029-04-090810-1	1	Comp	09-08-2010	mg/L	<0.0100		0.0100	0.005		0.14			
Total Concentration Results:	29	Avg:	.0132124	Min:	.0020000	Max:	.1250000						
Total Mass Results:	0	Avg:		Min:		Max:							

### Semi-Volatile Organic Compounds

Sample ID	MonPoint	Collection Method	Collection Date	CONCENTRATION					MASS				
				Units	Result	Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations
3RD QUARTER	1	Grab	08-04-2004	mg/L	<0.02			0.01					
Total Concentration Results:	1	Avg:	.0100000	Min:	.0100000	Max:	.0100000						
Total Mass Results:	0	Avg:		Min:		Max:							

### Silver

Sample ID	MonPoint	Collection Method	Collection Date	CONCENTRATION					MASS				
				Units	Result	Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations
030000409C	1	Comp	01-29-2003	mg/L	<0.0005			0.00025					
030000688C	1	Comp	02-20-2003	mg/L	<0.0005			0.00025					
030001093C	1	Comp	03-19-2003	mg/L	<0.0005			0.00025		0.13			
030001703C	1	Comp	04-25-2003	mg/L	<0.0005			0.00025		0.13			
030002183C	1	Comp	05-28-2003	mg/L	<0.0005			0.00025		0.13			

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## Silver

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS					
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations	Daily Limit
04050223-001	1	Comp	09-24-2003	mg/L	<0.0005			0.00025		0.13				
030003498C	1	Comp	10-28-2003	mg/L	<0.0005			0.00025		0.13				
040003044C	1	Comp	01-21-2004	mg/L	<0.002			0.001		0.13				
MAY 2004	1	Comp	05-04-2004	mg/L	<0.010			0.005		0.13				
3RD QUARTER	1	Comp	08-04-2004	mg/L	<0.010			0.005		0.13				
OCTOBER 2004	1	Comp	10-14-2004	mg/L	<0.010			0.005		0.13				
May 05 Week 3	1	Comp	05-10-2005	mg/L	<0.0005			0.00025		0.13				
September 05 Week 2	1	Comp	08-16-2005	mg/L	<0.0005			0.00025		0.13				
November 05 Week 3	1	Comp	10-28-2005	mg/L	<0.0005			0.00025		0.13				
April 06 Week 2	1	Comp	03-28-2006	mg/L	<0.0005			0.00025		0.13				
June 06 Week 1	1	Comp	05-16-2006	mg/L	<0.0005			0.00025		0.13				
September 06 Week 1	1	Comp	08-11-2006	mg/L	<0.0005			0.00025		0.13				
November 06 Week 3	1	Comp	10-17-2006	mg/L	<0.0005			0.00025		0.13				
April 07 Week 1	1	Comp	03-09-2007	mg/L	<0.0005			0.00025		0.13				
August 07 Week 5	1	Comp	08-16-2007	mg/L	<0.0005			0.00025		0.13				
MARCH 08 WEEK 3	1	Comp	03-21-2008	mg/L	<0.005			0.0025		0.13				
JUNE 08 WEEK 4	1	Comp	06-26-2008	mg/L	<0.010			0.005		0.13				
OCTOBER 08 WEEK 2	1	Comp	10-09-2008	mg/L	<0.010			0.005		0.13				
MARCH 09 WEEK 2	1	Comp	03-10-2009	mg/L	<0.010			0.005		0.13				
PTX-0029-04-121709-1	1	Comp	12-17-2009	mg/L	<0.000500		0.00050	0.00025		1.51				
PTX-0029-04-090810-1	1	Comp	09-08-2010	mg/L	0.000570			0.000570		1.51				
Total Concentration Results: 26	Avg: .0014738	Min: .0002500	Max: .0050000											
Total Mass Results: 0	Avg:	Min:	Max:											

## Strontium

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS					
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations	Daily Limit
040003044C	1	Comp	01-21-2004	mg/L	0.759			0.759						
MAY 2004	1	Comp	05-04-2004	mg/L	1.10			1.10						
3RD QUARTER	1	Comp	08-04-2004	mg/L	1.56			1.56						
OCTOBER 2004	1	Comp	10-14-2004	mg/L	1.20			1.20						
May 05 Week 3	1	Comp	05-10-2005	mg/L	0.12			0.12						

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### Strontium

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS			
						Reslt Flags	Reporting Limit	Adjusted Result	Daily Limit	Monthly Limit	Result (lbs/day)	Violations
September 05 Week 2	1	Comp	08-16-2005	mg/L	1.26			1.26				
November 05 Week 3	1	Comp	10-28-2005	mg/L	1.09			1.09				
April 06 Week 2	1	Comp	03-28-2006	mg/L	1.4			1.4				
June 06 Week 1	1	Comp	05-16-2006	mg/L	1.35			1.35				
September 06 Week 1	1	Comp	08-11-2006	mg/L	1.37			1.37				
November 06 Week 3	1	Comp	10-17-2006	mg/L	0.824			0.824				
April 07 Week 1	1	Comp	03-09-2007	mg/L	1.33			1.33				
August 07 Week 5	1	Comp	08-16-2007	mg/L	1.16			1.16				
November 07 Week 3	1	Comp	10-26-2007	mg/L	1.07			1.07				
MARCH 08 WEEK 3	1	Comp	03-21-2008	mg/L	0.565			0.565				
JUNE 08 WEEK 4	1	Comp	06-26-2008	mg/L	1.44			1.44				
OCTOBER 08 WEEK 2	1	Comp	10-09-2008	mg/L	1.14			1.14				
MARCH 09 WEEK 2	1	Comp	03-10-2009	mg/L	1.01			1.01				
PTX-0029-04-121709-1	1	Comp	12-17-2009	mg/L	1.09			1.09				
PTX-0029-04-090810-1	1	Comp	09-08-2010	mg/L	1.03			1.03				
Total Concentration Results: <u>20</u>		Avg: <u>1.0934000</u>	Min: <u>.1200000</u>		Max: <u>1.5600000</u>							
Total Mass Results: <u>0</u>		Avg:	Min:		Max:							

### TKN

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS			
						Reslt Flags	Reporting Limit	Adjusted Result	Daily Limit	Monthly Limit	Result (lbs/day)	Violations
3RD QUARTER	1	Comp	08-04-2004	mg/L	3.97			3.97				
April 06 Week 2	1	Comp	03-28-2006	mg/L	<0.5			0.25				
June 06 Week 1	1	Comp	05-16-2006	mg/L	4.21			4.21				
April 07 Week 1	1	Comp	03-09-2007	mg/L	2.63			2.63				
Total Concentration Results: <u>4</u>		Avg: <u>2.7650000</u>	Min: <u>.2500000</u>		Max: <u>4.2100000</u>							
Total Mass Results: <u>0</u>		Avg:	Min:		Max:							

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## Total O&G

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS					
						Rest Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations	Daily Limit
MAY 2004	1	Grab	05-04-2004	mg/L	<5.2			2.6		200				
3RD QUARTER	1	Grab	08-04-2004	mg/L	<5.2			2.6		200				
OCTOBER 2004	1	Grab	10-14-2004	mg/L	<5.38			2.69		200				
May 05 Week 3	1	Grab	05-10-2005	mg/L	<5			2.5		200				
September 05 Week 2	1	Grab	08-16-2005	mg/L	<5			2.5		200				
November 05 Week 3	1	Grab	10-28-2005	mg/L	<5			2.5		200				
April 06 Week 2	1	Grab	03-28-2006	mg/L	<5			2.5		200				
June 06 Week 1	1	Grab	05-16-2006	mg/L	<5			2.5		200				
September 06 Week 1	1	Grab	08-11-2006	mg/L	<5			2.5		200				
November 06 Week 3	1	Grab	10-17-2006	mg/L	<5.00			2.5		200				
April 07 Week 1	1	Grab	03-09-2007	mg/L	<5.00			2.5		200				
August 07 Week 5	1	Grab	08-16-2007	mg/L	5.05			5.05		200				
November 07 Week 3	1	Grab	10-26-2007	mg/L	<5.00			2.5		200				
MARCH 08 WEEK 3	1	Grab	03-21-2008	mg/L	<5.7			2.85		200				
JUNE 08 WEEK 4	1	Grab	06-26-2008	mg/L	<5.8			2.9		200				
OCTOBER 08 WEEK 2	1	Grab	10-09-2008	mg/L	<6.0			3		200				
MARCH 09 WEEK 2	1	Grab	03-10-2009	mg/L	7.28			7.28		200				
Total Concentration Results:	17	Avg:	3.0276471	Min:	2.5000000	Max:	7.2800000							
Total Mass Results:	0	Avg:		Min:		Max:								

## TS, Suspended

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS					
						Rest Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit	Result (lbs/day)	Violations	Daily Limit
020000393A	1	Comp	01-24-2002	mg/L	<20			10						
030000409A	1	Comp	01-29-2003	mg/L	<20			10						
030000688A	1	Comp	02-20-2003	mg/L	28			28						
030001093A	1	Comp	03-19-2003	mg/L	<20			10		2500				
030001703A	1	Comp	04-25-2003	mg/L	<20			10		2500				
030002183A	1	Comp	05-28-2003	mg/L	<8			4		2500				
030002477A	1	Comp	06-12-2003	mg/L	<20			10		2500				
30003114	1	Comp	09-24-2003	mg/L	<20			10		2500				
030003498B	1	Comp	10-28-2003	mg/L	<20			10		2500				

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### TS, Suspended

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS		
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit
040003044B	1	Comp	01-21-2004	mg/L	<8			4		2500	
MAY 2004	1	Comp	05-04-2004	mg/L	<5			2.5		2500	
3RD QUARTER	1	Comp	08-04-2004	mg/L	<5			2.5		2500	
OCTOBER 2004	1	Comp	10-14-2004	mg/L	7.00			7.00		2500	
May 05 Week 3	1	Comp	05-10-2005	mg/L	6			6		2500	
September 05 Week 2	1	Comp	08-16-2005	mg/L	6			6		2500	
November 05 Week 3	1	Comp	10-28-2005	mg/L	5			5		2500	
April 06 Week 2	1	Comp	03-28-2006	mg/L	<3			1.5		2500	
June 06 Week 1	1	Comp	05-16-2006	mg/L	<3			1.5		2500	
September 06 Week 1	1	Comp	08-11-2006	mg/L	<3			1.5		2500	
November 06 Week 3	1	Comp	10-17-2006	mg/L	9.8			9.8		2500	
April 07 Week 1	1	Comp	03-09-2007	mg/L	<3.00			1.5		2500	
August 07 Week 5	1	Comp	08-16-2007	mg/L	5.5			5.5		2500	
November 07 Week 3	1	Comp	10-26-2007	mg/L	50			50		2500	
MARCH 08 WEEK 3	1	Comp	03-21-2008	mg/L	<1.5			0.75		2500	
JUNE 08 WEEK 4	1	Comp	06-26-2008	mg/L	5.56			5.56		2500	
OCTOBER 08 WEEK 2	1	Comp	10-09-2008	mg/L	2.5			2.5		2500	
MARCH 09 WEEK 2	1	Comp	03-10-2009	mg/L	<1.2			0.6		2500	
Total Concentration Results: <u>27</u>		Avg: <u>7.9892593</u>	Min: <u>.6000000</u>		Max: <u>50.0000000</u>						
Total Mass Results: <u>0</u>		Avg:	Min:		Max:						

### TTO

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS		
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit
030000409E	1	Comp	01-29-2003	mg/L	<0.05			0.025			
030000688E	1	Comp	02-20-2003	mg/L	<0.05			0.025			
030001093E	1	Comp	03-19-2003	mg/L	<0.5			0.25		5.818	
030001703E	1	Comp	04-25-2003	mg/L	<0.05			0.025		5.818	
030002183D	1	Comp	05-28-2003	mg/L	0.01			0.01		5.818	
030002477E	1	Comp	06-12-2003	mg/L	<0.0002			0.0001		5.818	
030003498E	1	Comp	10-28-2003	mg/L	0.015			0.015		5.818	
040003044E	1	Comp	01-21-2004	mg/L	0.034			0.034		5.818	

Permit: **PTX-0029-04**  
 Permittee: **Skinner Landfill**  
 Location: **Cincinnati-Dayton Road , West Chester, OH 45069**

## TTO

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS		
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit
MAY 2004	1	Grab	05-04-2004	mg/L	<0.100	C		0.05		5.818	
OCTOBER 2004	1	Grab	10-14-2004	mg/L	<0.050	C		0.025		5.818	
May 05 Week 3	1	Comp	05-10-2005	mg/L	<0.05			0.025		5.818	
September 05 Week 2	1	Comp	08-16-2005	mg/L	0.0721			0.0721		5.818	
November 05 Week 3	1	Comp	10-28-2005	mg/L	0.0981			0.0981		5.818	
April 06 Week 2	1	Comp	03-28-2006	mg/L	0.014			0.014		5.818	
June 06 Week 1	1	Comp	05-16-2006	mg/L	0.011			0.011		5.818	
September 06 Week 1	1	Comp	08-11-2006	mg/L	0.068			0.068		5.818	
November 06 Week 3	1	Comp	10-17-2006	mg/L	0.0355			0.0355		5.818	
April 07 Week 1	1	Grab	03-09-2007	mg/L	<0.05	C		0.025		5.818	
August 07 Week 5	1	Comp	08-16-2007	mg/L	0.0163			0.0163		5.818	
November 07 Week 3	1	Comp	10-26-2007	mg/L	0.0379			0.0379		5.818	
MARCH 08 WEEK 3	1	Grab	03-21-2008	mg/L	<0.100	C		0.05		5.818	
OCTOBER 08 WEEK 2	1	Comp	10-09-2008	mg/L	<0.100			0.05		5.818	
APRIL 09 WEEK 1	1	Comp	04-02-2009	mg/L	<0.100			0.05			
PTX-0029-04-122209-1	1	Comp	12-22-2009	mg/L	0.392			0.392			
PTX-0029-04-090810-1	1	Comp	09-08-2010	mg/L	0.0357			0.0357			
Total Concentration Results:	25	Avg: .0575880	Min: .0001000	Max: .3920000							
Total Mass Results:	0	Avg:	Min:	Max:							

## Volatile Organic Compounds

Sample ID	MonPoint	Collection Method	Collection Date	Units	Result	CONCENTRATION			MASS		
						Reslt Flags	Reporting Limit	Adjusted Result	Violations	Daily Limit	Monthly Limit
3RD QUARTER	1	Grab	08-04-2004	mg/L	<0.005			0.0025			
Total Concentration Results:	1	Avg: .0025000	Min: .0025000	Max: .0025000							
Total Mass Results:	0	Avg:	Min:	Max:							

Permit: **PTX-0029-04**  
 Permittee: **Skinner Landfill**  
 Location: Cincinnati-Dayton Road , West Chester, OH 45069

## Zinc

Sample ID	MonPoint	Collection Method	Collection Date	Units	CONCENTRATION				MASS				
					Result	Reslt Flags	Reporting Limit	Adjusted Result	Daily Limit	Monthly Limit	Result (lbs/day)	Daily Limit	Monthly Limit
MAY 2004	1	Comp	05-04-2004	mg/L	0.022			0.022	2.73				
3RD QUARTER	1	Comp	08-04-2004	mg/L	0.033			0.033	2.73				
OCTOBER 2004	1	Comp	10-14-2004	mg/L	0.033			0.033	2.73				
May 05 Week 3	1	Comp	05-10-2005	mg/L	<0.050			0.025	2.73				
September 05 Week 2	1	Comp	08-16-2005	mg/L	<0.050			0.025	2.73				
November 05 Week 3	1	Comp	10-28-2005	mg/L	<0.050			0.025	2.73				
April 06 Week 2	1	Comp	03-28-2006	mg/L	<0.050			0.025	2.73				
June 06 Week 1	1	Comp	05-16-2006	mg/L	<0.050			0.025	2.73				
September 06 Week 1	1	Comp	08-11-2006	mg/L	<0.050			0.025	2.73				
November 06 Week 3	1	Comp	10-17-2006	mg/L	0.0233			0.0233	2.73				
April 07 Week 1	1	Comp	03-09-2007	mg/L	<0.02			0.01	2.73				
August 07 Week 5	1	Comp	08-16-2007	mg/L	<0.035			0.0175	2.73				
November 07 Week 3	1	Comp	10-26-2007	mg/L	<0.025			0.0125	2.73				
MARCH 08 WEEK 3	1	Comp	03-21-2008	mg/L	<0.010			0.005	2.73				
JUNE 08 WEEK 4	1	Comp	06-26-2008	mg/L	<0.010			0.005	2.73				
OCTOBER 08 WEEK 2	1	Comp	10-09-2008	mg/L	0.023			0.023	2.73				
MARCH 09 WEEK 2	1	Comp	03-10-2009	mg/L	<0.010			0.005	2.73				
PTX-0029-04-121709-1	1	Comp	12-17-2009	mg/L	0.0133			0.0133	1.44				
PTX-0029-04-090810-1	1	Comp	09-08-2010	mg/L	0.0164			0.0164	1.44				
Total Concentration Results: <u>19</u>		Avg: <u>.0194211</u>	Min: <u>.0050000</u>	Max: <u>.0330000</u>									
Total Mass Results: <u>0</u>		Avg:	Min:	Max:									

## **APPENDIX D**

### **Concurrence Letter from Ohio EPA**

**Environmental  
Protection Agency**

John Kasich, Governor  
Mary Taylor, Lt. Governor  
Scott J. Nally, Director

August 16, 2012

Mr. Richard C. Karl, Director  
Superfund Division  
United States Environmental Protection Agency  
Region 5  
77 West Jackson Boulevard (S-6J)  
Chicago, Illinois 60604-3590

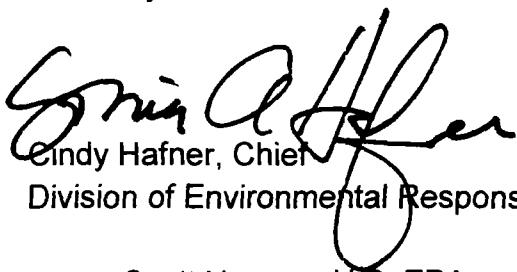
**RE: Skinner Landfill Superfund Site, Butler County, Ohio**

Dear Mr. Karl:

The Ohio Environmental Protection Agency's (Ohio EPA) Division of Environmental Response and Revitalization is pleased to concur with the Explanation of Significant Differences (ESD) for the Skinner Landfill Superfund Site, which is set to be issued in September, 2012. Ohio EPA agrees that it was appropriate to not require the installation of the upgradient groundwater barrier as described in the ESD.

The Ohio EPA looks forward to the continued partnership on the remediation of this Site. If you have any questions, please feel free to contact Charles Mellon, Site Coordinator, Division of Environmental Response and Revitalization, at 937-285-6056, or you may contact me at 614-644-2274.

Sincerely,



Cindy Hafner, Chief  
Division of Environmental Response and Revitalization

cc: Scott Hansen, U.S. EPA

ec: Charles Mellon, DERR - SWDO  
Tiffani Kavalec, DERR Manager – Assessment, Cleanup and Reuse Section

## **APPENDIX E**

### **Draft Advertisement of the ESD**

**seal**

**EPA Announces An  
Explanation of Significant Differences  
for the Skinner Landfill Superfund Site  
West Chester, Ohio**

The U.S. Environmental Protection Agency is modifying its 1993 cleanup decision for the Skinner Landfill, West Chester, Ohio. The Agency is legally required to issue an official document called an “explanation of significant differences” to outline the changes.

Under the modification, upgradient groundwater control measures will no longer be used since groundwater contamination has not exceeded site-specific groundwater trigger levels. This change will not affect the original cleanup plan. Groundwater will continue to be collected and treated in an “interception system” which will prevent contaminants from moving off-site. Costs to operate and maintain the cleanup systems will not change.

The report outlining the differences, along with other site-related documents, will be available for review at Middletown Public Library System, West Chester Branch, 7900 Cox Road, West Chester, and at [www.epa.gov/region5/cleanup/skinner](http://www.epa.gov/region5/cleanup/skinner).

For more information, contact:

**Susan Pastor**  
Community Involvement  
Coordinator  
800-621-8431, ext. 31325  
[pastor.susan@epa.gov](mailto:pastor.susan@epa.gov)

**Scott Hansen**  
Remedial Project Manager  
800-621-8431, ext. 61999  
[hansen.scott@epa.gov](mailto:hansen.scott@epa.gov)

## **APPENDIX F**

### **Administrative Record Index**

U.S. ENVIRONMENTAL PROTECTION AGENCY  
REMEDIAL ACTION

ADMINISTRATIVE RECORD  
FOR  
SKINNER LANDFILL SITE  
WEST CHESTER, BUTLER COUNTY, OHIO

UPDATE #5  
AUGUST 30, 2012

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
1	08/00/03	Earth Tech, Inc.	Skinner Landfill Work Group	Operation and Maintenance 121 Long Term Performance Plan for the Skinner Landfill Site (SDMS ID: 348249)	
2	10/00/03	Earth Tech, Inc.	Skinner Landfill Work Group	Remedial Action Quarter- 325 ly Monitoring Report Third Quarter 2003 for the Skinner Landfill Site (SDMS ID: 277866)	
3	01/00/04	Earth Tech, Inc.	Skinner Landfill Work Group	Remedial Action Quarter- 517 ly Monitoring Report Fourth Quarter 2003 for the Skinner Landfill Site (SDMS ID: 277867)	
4	04/00/04	Earth Tech, Inc.	Skinner Landfill Work Group	Remedial Action Quarter- 481 ly Monitoring Report First Quarter 2004 for the Skinner Landfill Site (SDMS ID: 277868)	
5	07/00/04	Earth Tech, Inc.	Skinner Landfill Work Group	Remedial Action Quarter- 507 ly Monitoring Report Second Quarter 2004 for the Skinner Landfill Site (SDMS ID: 277869)	
6	10/00/04	Earth Tech, Inc.	Skinner Landfill Work Group	Remedial Action Quarter- 395 ly Monitoring Report Third Quarter 2004 for the Skinner Landfill Site (SDMS ID: 277870)	
7	01/00/05	Earth Tech, Inc.	Skinner Landfill Work Group	Remedial Action Quarter- 572 ly Monitoring Report Fourth Quarter 2004 for the Skinner Landfill Site (SDMS ID: 277871)	

**Skinner Landfill AR  
Update #5  
Page 2**

<b><u>NO.</u></b>	<b><u>DATE</u></b>	<b><u>AUTHOR</u></b>	<b><u>RECIPIENT</u></b>	<b><u>TITLE/DESCRIPTION</u></b>	<b><u>PAGES</u></b>
8	04/00/05	Earth Tech, Inc.	Skinner Landfill Work Group	Remedial Action Quarter- ly Monitoring Report First Quarter 2005 for the Skinner Landfill Site (SDMS ID: 277872)	378
9	07/00/05	Earth Tech, Inc.	Skinner Landfill Work Group	Remedial Action Quarter- ly Monitoring Report Second Quarter 2005 for the Skinner Landfill Site (SDMS ID: 277873)	238
10	10/00/05	Earth Tech, Inc.	Skinner Landfill Work Group	Remedial Action Quarter- ly Monitoring Report Third Quarter 2005 for the Skinner Landfill Site (SDMS ID: 277874)	324
11	01/00/06	Earth Tech, Inc.	Skinner Landfill Work Group	Remedial Action Quarter- ly Monitoring Report Fourth Quarter 2005 for the Skinner Landfill Site (SDMS ID: 277875)	312
12	04/00/06	Earth Tech, Inc.	Skinner Landfill Work Group	Remedial Action Quarter- ly Monitoring Report First Quarter 2006 for the Skinner Landfill Site (SDMS ID: 277876)	366
13	07/00/06	Earth Tech, Inc.	Skinner Landfill Work Group	Remedial Action Quarter- ly Monitoring Report Second Quarter 2006 for the Skinner Landfill Site (SDMS ID: 277877)	339
14	10/00/06	Earth Tech, Inc.	Skinner Landfill Work Group	Remedial Action Quarter- ly Monitoring Report Third Quarter 2006 for the Skinner Landfill Site (SDMS ID: 277878)	346
15	01/00/07	Earth Tech, Inc.	Skinner Landfill Work Group	Remedial Action Quarter- ly Monitoring Report Fourth Quarter 2006 for the Skinner Landfill Site (SDMS ID: 277879)	367

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Update #5  
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<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
16	04/00/07	Earth Tech, Inc.	Skinner Landfill Work Group	Remedial Action Quarter- ly Monitoring Report First Quarter 2007 for the Skinner Landfill Site (SDMS ID: 277880)	372
17	07/00/07	Earth Tech, Inc.	Skinner Landfill Work Group	Remedial Action Quarter- ly Monitoring Report Second Quarter 2007 for the Skinner Landfill Site (SDMS ID: 323234)	297
18	10/00/07	Earth Tech, Inc.	Skinner Landfill Work Group	Remedial Action Quarter- ly Monitoring Report Third Quarter 2007 for the Skinner Landfill Site (SDMS ID: 323235)	257
19	01/00/08	Earth Tech, Inc.	Skinner Landfill Work Group	Remedial Action Quarter- ly Monitoring Report Fourth Quarter 2007 for the Skinner Landfill Site (SDMS ID: 323236)	379
20	04/00/08	Earth Tech, Inc.	Skinner Landfill Work Group	Remedial Action Quarter- ly Monitoring Report First Quarter 2008 for the Skinner Landfill Site (SDMS ID: 323237)	444
21	07/00/08	Earth Tech, Inc.	Skinner Landfill Work Group	Remedial Action Quarter- ly Monitoring Report Second Quarter 2008 for the Skinner Landfill Site (SDMS ID: 323238)	334
22	10/00/08	Earth Tech, Inc.	Skinner Landfill Work Group	Remedial Action Quarter- ly Monitoring Report Third Quarter 2008 for the Skinner Landfill Site (SDMS ID: 323239)	278
23	01/00/09	Earth Tech, Inc.	Skinner Landfill Work Group	Remedial Action Quarter- ly Monitoring Report Fourth Quarter 2008 for the Skinner Landfill Site (SDMS ID: 348250)	247

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Update #5  
Page 4**

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
24	03/17/09	U.S. EPA	File	Third Five-Year Review Report for the Skinner	130
25	04/00/09	AECOM Environment	Skinner Landfill Site Group	Remedial Action Quarterly Monitoring Report First Quarter 2009 for the Skinner Landfill Site (348251)	290
26	07/00/09	AECOM Environment	Skinner Landfill Site Group	Remedial Action Quarterly Monitoring Report Second Quarter 2009 for the Skinner Landfill Site (SDMS ID: 348252)	281
27	10/00/09	AECOM Environment	Skinner Landfill Site Group	Remedial Action Quarterly Monitoring Report Third Quarter 2009 for the Skinner Landfill Site	
28	01/00/10	AECOM Environment	Skinner Landfill Site Group	Remedial Action Quarterly Monitoring Report Fourth Quarter 2009 for the Skinner Landfill Site Landfill Superfund Site	
29	07/00/10	AECOM Environment	Skinner Landfill Site Group	Remedial Action Semi-Annual Monitoring Report First Half 2010 for the Skinner Landfill Site	
30	01/00/11	AECOM Environment	Skinner Landfill Site Group	Remedial Action Semi-Annual Monitoring Report Second Half 2010 for the Skinner Landfill Site	
31	07/00/11	AECOM Environment	Skinner Landfill Site Group	Remedial Action Semi-Annual Monitoring Report First Half 2011 for the Skinner Landfill Site	
32	01/00/12	AECOM Environment	Skinner Landfill Site Group	Remedial Action Semi-Annual Monitoring Report Second Half 2011 for the Skinner Landfill Site	